Jonathan A. Hill, Bookseller, Inc.

325 West End Avenue, Apt. 10B New York City, New York, 10023-8145 Tel: 646 827-0724 Fax: 212 496-9182 E-mail: JAHillBooks@aol.com

Catalogue 202

Proofs

Science, Medicine, Natural History,

Mineralogy, & Bibliography

Selective Subject Index on Following Pages

Selective Subject Index

Acoustics: 50, 51 Aeronautics: 45

Agriculture: 18, 29, 36, 60

Alchemy: 11 Americana: 92 Anatomy: 77, 79 Architecture: 97 Art: 7, 50, 67 Artillery: 41 Astrology: 97

Astronomy: 25, 33, 44, 52, 54, 62, 65, 71, 83, 93, 97, 99

Auction Catalogues: 2-10

Balneology: 75

Bibliography: 2-10, 22, 32, 37, 47, 69, 76, 87

Biography: 47 Biology: 16, 51

Botany: 1, 12, 16, 21, 30, 59, 63, 64, 72, 73, 81, 90, 92, 94

Bridges: 22, 58 Calculus: 26 Cardiology: 82

Catalogues: 2-10, 22, 32, 69, 76

Ceramics: 80

Chemistry: 11, 15, 19, 27-29, 34, 38, 39, 42, 43, 45, 49, 51, 53, 56, 64, 66, 74,

80, 86, 87, 91, 95, 100 Color Theory: 79, 99 Comets: 62, 93 Computers: 97

Crystallography: 13, 52

Dibner items: 21 Dictionaries: 97

Dyeing & Bleaching: 34, 43, 64, 86 Economics: 19, 30, 64, 72, 73, 91 Electricity & Magnetism: 51, 70

Engineering: 58, 78 Entomology: 72, 73 Evolution: 31, 51

Forests: 30

Garrison-Morton items: 28, 79, 88

Gems: 20, 23

Geology: 12-14, 22, 29, 52, 56, 57, 75, 80, 81

Geometry: 46 Glass: 68

History: 17, 29, 48

Hoover items: 20, 27, 42, 48

Horticulture: 62

Hydraulics: 22, 52, 58, 71, 78 Inoculation & Vaccination: 61 Instruments: 45, 50, 68, 70, 84, 97

Law: 48

Machines: 22, 58, 60

Mathematics: 26, 46, 66, 93, 97, 99 Mechanics: 41, 50, 58, 70, 71, 97

Medicine: 12, 28, 40, 61, 77, 79, 82, 85, 88

Metallurgy: 17, 27, 42, 48, 49, 53 Meteorology: 29, 50, 84, 89

Microscopy: 68 Military History: 69

Mineralogy: 13, 20, 22, 23, 29, 39, 42, 53, 56, 57, 80, 90, 95, 100

Mining: 17, 22, 42, 48 49

Music: 97

Natural History: 1, 12-14, 16, 20, 21, 23, 30, 31, 52, 56 57, 59, 63, 72, 73, 75,

81, 90, 92, 94, 100 Navigation: 54 Newtoniana: 26 Ophthalmology: 79

Optics: 24-26, 50, 68, 71, 79

Paleontology: 13 Pathology: 88 Pharmacology: 87 Philosophy: 98, 99

Physics: 24, 29, 41, 50, 51, 58, 66, 70, 71, 97-99

Physiology: 29, 79, 88 Plastic surgery: 85 Surgery: 85 Surveying: 65 Taxidermy: 90

Technology: 17, 19, 27, 43, 48, 49, 58, 60, 64, 67, 72, 73, 80, 86, 91, 96

Textbooks: 15, 27, 38, 39, 87

Textiles: 34, 43, 72, 73 Voyages & Travels: 81 Wine & Beer: 18, 36, 62

Zoology: 77, 90

Catalogue Starts on Following Page

Catalogue 202

"Its Effect was Profound and Permanent"-Morton

1. ADANSON, **Michel**. *Familles des Plantes*. One folding engraved plate. 2 p.l., cccxxv, 189, [1] pp.; 1 p.l., 24, [4], 640 pp. Two vols. 8vo, cont. speckled sheep (corners a bit worn), spines nicely gilt, contrasting leather lettering pieces on spines. Paris: Vincent, 1763. \$1750.00

First edition of this important work in botanical classification. In this book Adanson proclaimed his contempt for "systems" and proposed a natural classification based upon all characters rather than upon a few arbitrarily selected ones, an attempt that brought him into conflict with Linnaeus.

Adanson (1727-1806), was sent to Senegal in 1748 to catalogue the natural resources of the country. "The bewildering diversity of tropical vegetation makes the systems of classification proposed by Tournefort and Linnaeus appear pitifully inadequate, based as they had been on the wild flora of Europe and a limited number of cultivated plants...he concluded that, by making a large number of systems and then putting together those plants which belonged together in the greatest number of systems without attaching greater importance to one set of characters than another, he could make one generally satisfactory natural system."—from the "Introduction" to Vol. II, pp. xcii-xciii of the *Hunt Botanical Catalogue*.

The first volume contains a history of botanical classification and a detailed chronological table of botanical authors. Adanson was also a proponent of phonetic spelling and employed it to some extent in this work.

Verv good set.

№ *D.S.B.*, I, pp. 58-59. Hunt 577. Morton, *History of Botanical Science*, pp. 301-11–"Its effect was profound and permanent."

2. (AUCTION CATALOGUE: BELLANGER, Louis Paul). Catalogue des Livres de feu M. Bellanger, Tresorier General de Sceau de France. Par G. Martin. 2 p.l., xxviii, [4], 200, 201*-242*, 201-356, 251-534, 561-638, xii pp. 8vo, cont. calf (upper cover a little stained), spine gilt, red morocco lettering piece on spine. Paris: G. & C. Martin, 1740. \$2750.00

An important sale, compiled by Gabriel Martin; La Vallière acquired many of the books in this collection. The catalogue was originally compiled for the private use of the collector, as Martin states in the preface; no date of sale was given, which was to be announced by posters. Bellanger (1683-1738), Seigneur d'Hôtel-la-Faux and Nanteuil-la-Fosse, was advocate-general of the Cour des Aides before becoming treasurer-general. "Ce catalogue est volumineux, très détaillé et raisonné. Les ouvrages y sont bien choisis, et presque tous reliés par l'habile Boyet."—Peignot, p. 80. 3706 lots of books and MSS. Our copy is priced throughout in a contemporary hand. Bellanger's collection of prints is present as well (the final xii pages; 62 large lots).

Very good copy, lacking, as is often the case, the 45-page author index at end. Bookplate of A. de St.-Ferriol. Stamp on title of Gustave Mouravit.

№ Bléchet, pp. 102-03. Gustave Brunet, *Dictionnaire de Bibliologie Catholique*, col. 414. Grolier Club, *Printed Catalogues of French Books Auctions* ... 1643-1830, 56. Guigard, II, p. 45. Pollard & Ehrman, p. 246n & no. 277.

With a Gutenberg Bible

3. (AUCTION CATALOGUE: FAVIER, Pierre Ignace Eloi). Catalogue des Livres de la Bibliotheque de feu Monsieur l'Abbé Favier, Prétre a Lille. Dont la Vente commencera le Jeudi 19 Septembre 1765. xxiv, 522 pp. 8vo, attractive antique calf-backed marbled boards (some light dampstaining), spine richly gilt. Lille: F.J. Jacquez, 1765.

[bound with]:

(—). Catalogue des Estampes et Tableaux du Cabinet de feu Mr. l'Abbé Favier, Prêtre, à Lille. 2 p.l., 143, [1] pp. 8vo (some light dampstaining). N.p. [but Lille]: 1765. \$3000.00

The rare auction catalogues describing the important collections of books, manuscripts, prints, drawings and paintings formed by Abbé Favier at Lille. The great treasure of this extensive, but little-known, provincial French library was a copy, on paper, of the Gutenberg Bible (lot 1), which realized 2,025 frs, only 75 frs less than the Gaignat copy on vellum four years later; its subsequent fate appears to be unknown (see De Ricci, p. 33, no. 44 who lists it among the "exemplaires perdus"). The other outstanding feature of Favier's collection was his group of works on the history of the Netherlands, including Lille (lots

4,768-5,216) which Peignot praises as "presque complète."

"Ces deux volumineux catalogues attestent le goût et les recherches immenses de l'abbé Favier: on remarquoit surtout dans sa bibliothèque une collection presque complète des ouvrages relatifs à l'histoire des Pays-Bas et à l'histoire de Lille. La littérature étrangère y étoit aussi très abondante."—Peignot, p. 98.

Favier also owned a collection of 104 paintings, 42 drawings and 2,163 prints, described here in the second catalogue. It was sold in the same month.

Fine copies, each priced throughout in a contemporary hand. Bookplates of E. Rolant and Denis du Péage.

- № I. Grolier Club, *Printed Catalogues of French Book Auctions...* 1643-1830, 182—"According to Danchin, eager Lille booksellers distributed the catalogue before it could be approved by the censors, and the auction was nearly cancelled by the authorities over the inclusion of heretical and licentious books, 26 of which were eventually removed from the sale." II. Grolier Club, *Printed Catalogues of French Book Auctions...* 1643-1830, 183. I & II: Lugt 1477.
- **4. (AUCTION CATALOGUE: LACROIX, Paul)**. *Catalogue des Livres et des Manuscrits, la plupart relatifs à l'Histoire de France, composant la Bibliothèque du Bibliophile Jacob [i.e. Paul Lacroix]*. 1 p.l., vi, 352 pp. 8vo, orig. blue wrappers (stitching to first few quires a little loose), uncut. Paris: Techener, 1839.

The very uncommon sale catalogue of the French history collection of Paul Lacroix (1807-1884), collector, novelist, publisher, translator, bibliographer, and librarian of the Arsenal. He was known as "Bibliophile Jacob."

"Ce catalogue offre une spécialité particulière, celle de l'histoire de France; les trois quarts environ des volumes enregistrés rentrent dans cette catégorie. Des notes nombreuses font ressortir ce qu'offrent d'intéressant des ouvrages assez peu connus."—Gustave Brunet, *Dictionnaire de Bibliologie Catholique*, col. 472. The sale started on 24 February 1840.

1945 lots. The sale was catalogued by the collector himself. As usual, without the "Tables des Auteurs" which was published subsequently.

A Librarian's Library

5. (AUCTION CATALOGUE: LORT). *A Catalogue of the Entire and Valuable Library of the late Rev. Michael Lort, D.D. F.R.S. and A.S.* which will be sold by Auction by Leigh and Sotheby...on Tuesday, April 5, 1791, and the Fourteen following Days...and then the Sale to re-commence on Wednesday, May 4, 1791, and to continue the Nine following Days... 2 p.l., 256 pp. 8vo, cont. boards (rebacked in attractive white paper, title with a tear carefully repaired on verso), modern printed paper label on

spine, uncut. [London]: 1791.

\$1950.00

The scarce sale catalogue of the library of Lort (1725-90), regius professor of Greek at Cambridge, librarian of Lambeth Palace, and vice-president of the Society of Antiquaries. Immediately after taking his degree at Trinity College, Cambridge, Lort served as Richard Mead's librarian. Lort formed a large library (6665 lots) and he often annotated his copies with notes and critical observations. The final 16 lots are MSS. including some illuminated examples.

Very good copy with the bookplates of the Bibliotheca Lindesiana and A.N.L. Munby. From the library of Prof. T.A. Birrell with his signature.

6. (AUCTION CATALOGUE: MARCHE, Georg August). Catalogus Bibliothecae B. Georgii Augusti Marchii Juris utriusque Doctoris et Senatoris Lipsiensis una cum Appendice aliorum Bonae Notae Librorum ex Omni Eruditionis Genere de Quibus Auctio Publica a die XV. Mart. 1784 in Collegio Rubro instituenda. 1 p.l., 246 pp.; 272 pp. Two parts in one vol. 8vo, cont. boards (some wear to binding). Leipzig: Loeper, [1784].

\$2250.00

Very rare; OCLC locates no copy in the U.S. Marche was a lawyer and city senator at Leipzig. The first part of this catalogue — 3593 lots — describes his large library, strong in law, philosophy, and history. There are many 17th-century books. The second part of the catalogue, which contains another 5228 lots, lists books from other consignors.

Very good copy.

- ≥ Loh, IV, p. 48.
- 7. (AUCTION CATALOGUE: MENTEN, J.J.). Catalogue d'une belle Collection de Tableaux et d'Estampes, délaissée par feu le Sieur J.J. Menten, dont la Vente se fera...Lundi 6 Septembre 1784, dans une Salle de l'Hôtel-de-Ville de Louvain. 26 pp.; 15 pp. Two parts in one vol. 8vo, modern paste-paper boards, red morocco label on upper cover. Louvain: L.J. Urban, [1784].

A rare art auction catalogue; no copy in OCLC. The first part lists 182 lots of paintings, four sculptures, and some natural history objects. Dimensions for each painting are given. Part Two describes 277 lots of prints.

Fine copy.

8. (AUCTION CATALOGUE: MOLS, F.). *Catalogue de Livres délaissés par feu Monsieur François Mols*, qui se vendront…le 2 de Mai 1791 & jours

suivans. 1 p.l., 87 pp. 8vo, self-wrappers, stitched as issued. Anvers: J. Grangé, [1791]. \$1500.00

There was an earlier François Mols sale in 1769 and I suspect the present catalogue offers material not in the earlier catalogue or, more unlikely, the unsold lots. While slight (666 lots), this catalogue is filled with really wonderful groups of book and art auction catalogues and all-too-briefly described manuscripts. Well over two-thirds of the lots are book and art auction catalogues, including many unfamiliar, famous, or rare ones.

Fine crisp copy. A contemporary note on the verso of the title-page states the auction will commence with lot 1. Priced throughout in a contemporary hand.
Blogie, I, col. 38.

A Great Bibliographer's Library

9. (AUCTION CATALOGUE: PEIGNOT). Catalogue d'une nombreuse Collection de Livres Anciens rares et curieux provenant de la Bibliothèque de feu Gabriel Peignot...dont la Vente aura lieu le Lundi 8 Mars et jours suivants... 2 p.l., ii pp., 1 leaf, 535 pp. 8vo, cont. cloth-backed pastepaper boards, uncut. Paris: J. Techener, 1852. \$1350.00

The sale catalogue of the library of the great bibliographer Peignot (1767-1849). Predictably, the bibliographical section, especially sale catalogues, is very rich. 4406 lots. MSS. are included.

Nice copy.

№ Blogie col. 70.

For another work by Peignot, please see item 76

10. (AUCTION CATALOGUE: SECOUSSE, Denis François). Catalogue des Livres de la Bibliotheque de M. Secousse, Avocat en Parlement, de l'Academie Roïale des Inscriptions et Belles-Lettres. 1 p.l., xvi, 565 pp. 8vo, cont. mottled sheep, spine gilt, orange morocco lettering piece on spine. Paris: Barrois, 1755. \$1750.00

An uncommonly handsome copy of this catalogue which described a truly imposing collection on the history of France, very carefully arranged and catalogued by the owner himself. The collection was especially rich in ephemeral literature and contained no less than 400 portfolios of broadsides; La Vallière bought heavily at this sale. This exemplary catalogue was printed by Didot.

8227 lots, including MSS. Priced throughout in a contemporary hand. Fine copy.

→ Grolier Club, *Printed Catalogues of French Book Auctions...1643-1830*, 120. Guigard, II, p. 433. Peignot, pp. 123-24—"Ce catalogue, précieux par un immense collection des livres sur l'histoire de France." Taylor, *Book Catalogues*, p. 135.

Influenced Stahl's Phlogiston Theory

11. BECHER, Johann Joachim. *Chymischer Glücks-Hafen, oder Grosse Chymische Concordanz und Collection, von funffzehen hundert Chymischen Processen...* Title in red & black. 4 p.l., 810, [35] pp. 4to, cont. panelled vellum over boards (a little warped), green morocco lettering piece on spine. Frankfurt: J.G. Schiele, 1682. \$4000.00

First edition of this important collection of 1500 detailed chemical and alchemical processes, including recipes for making the philosophers' stone; it was the author's final work. This was a significant source-book for Stahl who republished it in 1726, adding his own preface. Becher's combustion theory, involving the concept of *terra pinguis*, played an important role in the development of Stahl's own phlogiston theory. This is the first book "to mention the combustibility of coal gas."—Sotheran, I, 6082–(listing only the 1755 ed.).

Becher (1635-82), one of the most active chemists of the 17th century, studied alchemy and chemistry from a very early age. He served as imperial commercial counselor to Emperor Leopold I in Vienna and established new industries including glassworks, factories for the manufacture of textiles, and a chemical laboratory. He also wrote many notable works in chemistry, economics, education, mathematics, and mining. Thomson stated that Becher was "the first person who can with propriety be said to have attempted to construct a theory of Chemistry" (Partington, II, p. 643).

An uncommonly fine and attractive copy with none of the foxing which usually afflicts this book.

D.S.B., I, pp. 548-51. Duveen, p. 57. Ferguson, I, p. 86–(listing only the 1726 ed.). Neville, I, p. 104–"One of his most important books."

Large & Thick Paper Copy

12. BERTRAND, Élie. *Essai sur les Usages des Montagnes, avec une Lettre sur le Nil.* Title printed in red & black. xvi, 412 pp. 8vo, cont. marbled sheep (head of spine a little worn), spine richly gilt. Zürich: Heidegguer, 1754. \$1500.00

First edition, printed on large and thick paper. Bertrand (1712-77), Swiss naturalist and geologist and a member of many scientific societies throughout Europe, wrote several interesting books on earthquakes, the structure of the earth, and other geological matters.

In this work, Bertrand outlines the importance of mountains, particularly the Alps, to man (their beauty and medical benefits), the natural history of mountainous areas (including the flora, fauna, and geology), and their effect on the climate (as a source of winds and water). Pages 166-355 contain the author's

theory of mountain formation and his arrangement of minerals by species. A nice copy.

- * Kafker, The Encyclopedists as Individuals: A Biographical Dictionary of the Authors of the Encyclopédie, pp. 34-39. Poggendorff, I, 170.
- **13. BERTRAND, Élie**. Dictionnaire Universel des Fossiles propres et des Fossiles accidentels, contenant une Description des Terres, des Sables, des Sels, des Soufres, des Bitumes, des Pierres simples & composée, communes & prétieuses transparents & opaques, amorphes & figurées, des Minéraux, des Métaux, des Pétrifications du Règne animal, & du Règne végétal, &c. avec des recherches sur la formation de ces fossiles, sur leur origine, leur usages, &c. Titles printed in red & black. 1 p.l., xxxii, 284 pp.; 1 p.l., 256 pp. Two vols. in one. 8vo, cont. sheep, spine nicely gilt. The Hague: P. Gosse, Jr. & D. Pinet, 1763.

First edition, The Hague issue (there is also an Avignon issue). "Scarce. An early comprehensive dictionary defining terms used in the 18th century study of oryctology, which by today's convention would include all of the earth sciences such as geology, mineralogy, crystallography, paleontology, and vulcanology. In the alphabetical list, various terms deal with earths, salts, sulfurs, bitumens, petroleum, simple and complex stones, common and precious gems, minerals, metals, petrifications of animals and plants, the latest theories on their formation, and their uses. In many instances a substantial definition is provided, which shows Bertrand's good knowledge of the subject."—Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920, 523.

Nice copy.

- * Kafker, The Encyclopedists as Individuals: A Biographical Dictionary of the Authors of the Encyclopédie, pp. 34-39. Poggendorff, I, 170.
- **14. BEUST, Friedrich Constantin, Freiherrn von**. *Geognostische Skizze der wichtigsten Porphyrgebilde zwischen Freyberg, Frauenstein, Tharandt und Nossen*. Seven finely handcolored lithographed plates (all folding). 2 p.l., 110 pp., 3 leaves. 8vo, attractive cont. cloth, spine lettered in gilt. Freiberg: J.G. Engelhardt, 1835. \$1500.00

First edition of this very uncommon book. Beust was a high mining official in Freiberg who eventually became the chief mining administrator of Saxony. This is his first book in which he describes the geology of the most important ore-district of the Harz Mountains between Freiberg, Frauenstein, Tharandt, and Nossen. Mining has been carried on there since the middle of the 10th century and the chief deposits are silver, lead, copper, arsenic, and zinc ores.

The attractively handcolored lithographed plates depict, for the most part, geological cross-sections.

Fine copy.

Poggendorff, I, 180-81.

A Fine Set

15. BLACK, Joseph. *Lectures on the Elements of Chemistry, delivered in the University of Edinburgh...* Now published from his Manuscripts by John Robison. Engraved frontis. port. of Black & 3 engraved plates. lxvi [i.e., lxxvi], 556 pp.; 1 p.l., 762, [4] pp. Two vols. Large 4to, marbled boards (minor foxing at beginning & end of each vol.), attractive modern red calf spines & corners, flat spines gilt. Edinburgh: Mundell & Son, 1803.

\$5000.00

First edition and a very handsome set. These two monumental volumes are the only substantial account of the work of the founder of modern quantitative chemistry and discoverer of latent and specific heats. Black (1728-99), began to lecture upon his appointment as professor of medicine and chemistry at the University of Edinburgh in 1766. "His career thenceforward was exclusively that of a teacher...His success was conspicuous. During above thirty years he inculcated the elements of chemistry upon enthusiastic and continually growing audiences...His lectures thus had a powerful effect in popularizing chemistry."—D.N.B., II, pp. 572-73.

Black's lectures were not printed during his lifetime; they were circulated only in manuscript amongst his students. The present edition was prepared by his pupil, friend, and colleague, John Robison, who has added a long introduction and enriched each volume with notes.

A fine and large set. This copy lacks, as is often the case, the 19-page index (but a photocopy is laid-in). The 4-page "Explanation of the Plates," which is very often missing, is present.

Cole 158. Duveen, pp. 81-82–(lacking the Index). Partington, III, pp. 130-43.

"Of Prime Importance for Plant Biology"

16. BONNET, Charles. Recherches sur l'Usage des Feuilles dans les Plantes, et sur quelques autres Sujets relatifs a l'Histoire de la Vegetation. Engraved vignette on title & 31 folding engraved plates. Title in red & black. vii, [1], 343, [1] pp. Large 4to, cont. calf (corners a little bruised with one having a bit of wear), spine richly gilt, red morocco lettering piece on spine. Göttingen & Leyden: E. Luzac Sons, 1754. \$1500.00

First edition of this important book. "In the *Recherches*, Bonnet grouped five memoirs, all of which were of prime importance for plant biology: He precisely described the characteristics of the nutrition of leaves and of their transpiratory

phenomena. Although he did not know the kinds of gases (oxygen and carbon dioxide) produced and absorbed by green leaves exposed to light, Bonnet made very careful observations on their production. For his masterly experimentation, Bonnet should be considered one of the first naturalists to investigate experimentally the question of photosynthesis. He studied the movement of leaves and discovered the epinastic phenomena; he observed the position of leaves on the axis of the stalk and collected a great many anatomic facts; he returned to experiments on etiolation, on the movement of the sap, and on teratology."—D.S.B., II, p. 286.

The handsome plates were engraved by Jacob vander Schley and Wandelaer, who executed the famous anatomical plates of Albinus.

A fine and crisp copy.

- Pritzel 981.
- 17. BREITHAUPT, Johann Friedrich August. Die Bergstadt Freiberg im Königreiche Sachsen, in Hinsicht auf Geschichte, Statistik, Cultur und Gewerbe, besonders auf Bergbau und Hüttenwesen. Lithographed frontis. xvi, 276 pp. 8vo, orig. printed wrappers, uncut. Freiberg: Craz & Gerlach, 1825.

\$1350.00

First edition of this rare account of the great mining city Freiberg in Saxony which owes its origin to the discovery of silver mines ca. 1163. Freiberg has traditionally been the seat of the general administration of the mines throughout Saxony and is the home of the famous mining academy, which produced so many famous geologists and mineralogists.

Breithaupt (1791-1873), a leading mineralogist and professor of mineralogy at the mining academy at Freiberg (succeeding Mohs in 1826), has provided an extremely detailed account of the history, the chief landmarks, trades, educational institutions, and governmental structure of the city. The information regarding the mining and metallurgical activities of the town, as well as *Bergakademie* is incredibly rich.

Fine copy in original state.

- № D.S.B., II, pp. 440-41.
- **18. BREUCHEL, Philipp Jacob**. Breuchels umständliche und gründliche Beschreibung des edlen Weinstocks wie nemlich Weingärten und Weinberge aufs beste angelegt, hergestellet, unterhalten und benutzet...werden können. Nebst beygefügter Abhandlung von allen Sorten Trauben, nach der Bauart des Kernes von Churpfalz, als nemlich Neustatt, Gimmeldingen, Haard, Mussbach und Königsbach. 144 pp. Small 8vo, cont. half-vellum & paste-paper boards,

printed paper label on spine. Frankfurt am Main: Esslinger, 1781.

\$1950.00

First edition of this extremely uncommon work on viticulture in Germany, focusing on the Palatinate, one of the chief wine-making areas of the country. The author describes the best grapes for wine, methods of growing and pruning the vines, the best areas in the Palatinate to plant vines, and methods of fermentation.

A fine copy. OCLC locates only one copy in the U.S., at UC Davis.

Simon, Bibliotheca Vinaria, p. 119.

"A Valuable Book"-Duveen

19. BROWNRIGG, William. *The Art of making Common Salt, as now Practised in most Parts of the World; with several Improvements proposed in that Art, for the Use of the British Dominions*. Six folding engraved plates. xxiv, 295 pp., one leaf of errata. 8vo, cont. calf, double gilt fillet round sides, spine gilt. London: C. Davis et al., 1748. \$1950.00

First edition of Brownrigg's extensive work on the manufacture of common salt. Brownrigg (1712-1800), "engaged in a range of scientific enquiries with practical import. His illustrated 295-page book, *The Art of Making Common Salt* (1748), covers both processes and economics and calls on government to build and manage salt works and to regulate salt quality. An abridgement was published in the *Philosophical Transactions* of the Royal Society and an edition came out in the American colonies in 1776."—*ODNB*. Brownrigg's chemical researches in many ways paralleled those of Prietley, Cavendish, and Black and he came very near to being a chemical discoverer of the first rank.

Very good copy. According to the Bowyer ledgers 500 copies were printed.

Duveen, p. 104–"A valuable book." Partington, III, pp. 124-27.

The Best Edition

20. BRUECKMANN, Urban Friedrich Benedict. Abhandlung von Edelsteinen. 415 pp. 8vo, cont. half-sheep & speckled boards, lettering piece on spine. Braunschweig: im Verlag der Fürstl. Waysenhaus-Buchhandlung, 1773.

[bound with]:

—. Gesammlete und eigene Beyträge zu seiner Abhandlung von Edelsteinen. 4 p.l., 252, [4] pp. 8vo, cont. half-sheep & speckled boards (upper joint cracked but strong), spine gilt, contrasting leather lettering piece on

spine. Braunschweig: in der Fürstl. Waysenhaus-Buchhandlung, 1778. \$3500.00

Second and best edition, improved and greatly enlarged (1st ed.: 1757), accompanied by the first (of two) supplements. "In descriptive gemology, the present work, in its final version, was the most important treatise to appears in print since the last edition of De Boodt's *Gemmarum*, 1647, and was not superseded until the appearance of C P Brard's *Traité des Pierres Précieuses*, 1808."—Sinkankas, Vol. I, p. 160.

I. "Enormously enlarged: amplifies previous remarks but introduces many new stones, and with a most valuable appendix, p 359-88, concerning the 'largely unknown so-called gemstones' of older writers, becoming, in effect, a glossary of same as employed by Pliny and Boetius De Boodt, among others. This glossary is unique and deserves to be translated with an interpretation in the light of modern knowledge; there are hundreds of terms and I know of no other place in the literature where a similar glossary of ancient gemological/mineralogical terms exists. Other major differences: expands classification scheme to include new categories of gemstones and ornamental stones, eg, a ch[apter] on granites, another on stones that are 'hardened by fire,' namely nephrite and serpentine, amorphous gemstones (opal-like materials), new 'metallic' category that now includes lapis-lazuli, Armenian stone, malachite and marcasite, 'petrification of the animal kingdom' which includes turquoise, shark teeth, coral, and the like, and lastly, the dendritic 'Nannierstein' of the first edition is placed in its own category of 'sandstone-like' materials. In the 16-year interval since the first edition, Brückmann had not been idle, and in fact, as seen in the text comments, he carried on a lively correspondence with mineralogists all over Europe, paid visits to many to view their collections, visited museums, and otherwise steadily accumulated a vast fund of information which he distilled into this second edition."-Sinkankas 975.

II. First edition. "Greatly expands the basic work, incorporates many citations from pertinent contemporary literature, and gives results of personal experimentation on gemstones. First section treats generalities and comments on new methods of chemical analysis; also reviews important recent additions to gemological/mineralogical knowledge. The text now also contains much on the synthesis of minerals and gemstones, manufacture of imitations and falsifications, how they can be detected, a historical note on lapidary work, and adds much new material and locality information to all previous parts as well as introducing new gemstones."—Sinkankas 976.

Brückmann (1728-1812), son of famous Franz Ernst, was the professor of anatomy and surgery at the University of Braunschweig. He formed a collection of natural history specimens, numbering over 10,000, including a large suite of minerals.

Very good copies. Early stamp of "Dr Bloch" on each title.

* Hoover 185 & 186. Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920, 894 & 895—"Rare."

The Sexuality of Plants

21. CAMERARIUS, Rudolf Jakob. *Opuscula Botanici Argumenti*. Collegit, edidit Joann. Christian. Mikan. Engraved frontis. port. of the author. 1 p.l., vi, 224 pp. 8vo, cont. speckled boards (joints a bit worn, minor foxing & dampstaining). Prague: C. Barth, 1797. \$2500.00

First edition of the collected botanical writings of Camerarius (1665-1721), professor of medicine and director of the botanical garden at Tübingen, whose most important scientific achievement was the experimental demonstration of the sexuality of plants. In his *De Sexu Plantarum*, printed here, Camerarius announces "experimental proof that in flowering plants the anthers were male, the ovaries and styles female organs, and that viable seeds could not be formed without the addition of pollen."—Dibner 25–(1700 ed.).

Camerarius's scattered botanical writings were gathered here by Johann Christian Mikan (1769-1844),, professor of botany at Prague. As Sachs comments in his *History of Botany*, the present book is "apparently little known" (p. 386) and served as the basis for his extended account of Camerarius's achievements (pp. 385-90). Several of Koelreuter's essays on the sexuality of plants have been included.

Very good copy. This book is rare.

▶ D.S.B., XV, pp. 67-68. Morton, *History of Botanical Science*, pp. 214-20. Pritzel 1453.

22. CARLIAN-GOEURY & DALMONT, Victor, publishers. Catalogue des Livres de Fonds et d'Assortiment sur Toutes les Parties des Sciences, des Arts, de l'Industrie et des travaux publics, spécialement les Ponts et Chaussées, les mines, l'Architecture civile et hydraulique, etc. 100 pp. 8vo orig. printed wrappers (lower wrapper a little defective). Paris: 15 June 1839.

\$1250.00

A rare catalogue of books published by Carlian-Goeury & Dalmont, one of the leading publisher/dealers of scientific books in France of the period, and in stock from other publishers (including many imports from Britain). Their stock of new and antiquarian books was enormous and covers all aspects of the technical world including railroads, roads and bridges, civil and hydraulic engineering, mining, mineralogy, geology, mathematics (pure and applied), chemistry, and mechanics. Many of the items contain long and extensive notes with bibliographical details and information regarding the book's importance. Many 18th-century books are listed.

Fine copy. About 2000 books are listed, each priced. No copy located by OCLC in the U.S.

BNF, Catalogues de libraires et d'éditeurs 1811-1924, p. 48.

23. CARTHEUSER, Friedrich August. *Mineralogische Abhandlungen*. 2 p.l., 190, [2] pp.; 6 p.l., 243, [1] pp. Two vols. in one. 8vo, cont. speckled boards. Giessen: J.P. Krieger, 1771-73. \$2500.00

First edition. Cartheuser (1734-96), professor of mineralogy, botany, and chemistry at the University of Frankfurt an der Oder and later professor of medicine at Giessen, wrote many books on mineralogy, balneology, the falsification of wine, and chemistry. He became an advisor on mining and geological matters to the government.

"Very scarce. Cartheuser's *Mineralogische Abhandlungen* presents his ideas on mineralogical science. The work was intended as a textbook for an advanced level class in the study, and gives many philosophical arguments as to the nature of minerals in general."—Schuh, *Mineralogy & Crystallography: A Biobibliography*, 1469 to 1920, 1084.

Fine copy.

Sinkankas 1159.

Influential for Many Years

24. CAUCHY, Augustin Louis. *Nouveaux Exercices de Mathématiques* [& title to Part 8]: *Mémoire sur la Dispersion de la Lumière*. iv, 204, iv, 205-236 pp. Eight parts in six bound in one vol. Large 4to, attractive antique halfcalf & speckled boards, spine gilt, red morocco lettering piece on spine. Prague: 1835 [Parts 1-7] & J.F. Calve, 1836 [Part 8]. \$2500.00

First edition of this important memoir in which Cauchy explains the dispersion of light on the basis of the undulatory theory. It completes Fresnel's researches on the subject. Cauchy was the first to attempt to work out a mathematical basis for the properties of ether.

This book was written and printed in Prague where Cauchy resided as tutor to the Duc de Bordeaux after the abdication of his father, King Charles X.

Fine copy and quite scarce.

- № Buchwald, *The Rise of the Wave Theory of Light*, p. 308—"Cauchy's mathematics for the ether set a program of research that was pursued in France, Britain, and Germany during the 1830s, and (in Germany and France) through the 1850s. During the 1830s optical theory became very nearly synonymous with ether dynamics."
- 25. COELER (or COLER), Philipp Albert. Disputatio Optico-Astronomica de Veneris et Mercurii Phasibus, quam in celeberrima ad Albim Academia...sub Praesidio...Philippi Alberti Coleri...examini sistit...Johannes Eberhardus Busmannus...ad d. 27. April...Anno M.DC.LXIV. [8] leaves. Small 4to, modern marbled boards. Wittenberg: J. Borckard,

1664. \$2950.00

First edition of this very rare astronomical and optical work on the phases of Venus and Mercury. OCLC locates no copy in America. There are many references to Galileo and Hevelius in the text.

Fine copy

Lalande, p. 257-(describing a Leipzig issue of the same year).

With a Contribution by Newton

26. CRAIG, John. *De Calculo Fluentium Libri Duo. Quibus Subjunguntur Libri Duo De Optica Analytica*. Numerous woodcut diagrams in the text. 4 p.l., 92 pp. 4to, 18th-cent. marbled boards (sides rubbed, well rebacked in calf, title a little browned & soiled), spine gilt, red morocco lettering piece on spine. London: ex Officina Pearsoniana, 1718. \$4500.00

First edition of the third of Craig's major books but the first in order of composition. Craig (d. 1731), a fellow of the Royal Society and a good friend of Newton, was one of the very few in Britain to realize the vast possibilities of the calculus and was the most zealous of all English mathematicians in its use.

The present work, important for its advances in the calculus, is particularly interesting for the Preface in which Craig states that he showed the manuscript of the present book to Newton in 1685. Newton corroborated several objections raised by Craig to Tschirnhausen and contributed two equations of curves. Craig also provides an account of the steps that led to his interest in the fluxional calculus. Newton had a copy of this book in his library.

Craig's writings on optics (the second part of this book) have been largely ignored by historians of science.

A good copy. Bookplates of Harry Arnold of Arnbarrow and Michael Fryer. *D.S.B.*, III, pp. 458-59.

A Classic of Metallurgy

27. CRAMER, Johann Andreas. *Anfangsgründe der Probierkunst, in zweyen Theilen abgefasset, von welchen der erste die Theorie, der andere die Ausübung, in der natürlichen Ordnung und einer sehr verständlichen Lehrart darstellet...aus dem Lateinischen ins Deutsche übersetzt von C.E. Gellert. Six folding engraved plates. 32, 320, [18], [323]-682, [22] pp. 8vo, cont. boards (a little rubbed, one corner somewhat rounded). Stockholm: G. Kiesewetter, 1746.*

First edition in German of this famous metallurgical textbook, a greatly enlarged reworking of his *Elementa Artis Docimasticae* (1st ed., in Latin: 1739), translated and with the valuable notes of C.E. Gellert, professor of metallurgical

chemistry at the Freiberg Bergakademie.

Cramer (1710-77), was the first to reduce the art of assaying in metallurgy into a system and his textbook was the first of its kind. The first edition is a "profusely illustrated work [which] encompassed the entire art of assaying in two parts, one theoretical and one practical. In the preface he referred to the works of Agricola, Lazarus Ercker, and Stahl. All the instruments and apparatus of contemporary analytical chemistry were depicted and described exactly. In the *Elementa*, Cramer first described the use of the blowpipe in smelting small amounts of substances and in analyzing them."—D.S.B., Supp., p. 94.

Cramer, "the greatest assayer of his time" (*A.D.B.*), was appointed director of the Brunswick Mining and Metallurgy Administration in the Harz Mountains. The fine plates depict numerous metallurgical operations and instruments. Fine copy.

№ A.D.B., Vol. 4, pp. 547-48. Ferchl, p. 107. Hoover 238. Neville, I, p. 301–"One of the greatest works on analytical chemistry of the eighteenth century" (no copy of this ed. in the Neville collection). Partington, II, pp. 710-11. Poggendorff, I, 493-94. Schuh, *Mineralogy & Crystallography: A Biobibliography*, 1469 to 1920, 1193–"Very scarce."

First Attempt to Determine the Specific Heat of Gases

28. CRAWFORD, Adair. *Experiments and Observations on Animal Heat, and the Inflammation of Combustible Bodies; being an Attempt to Resolve these Phenomena into a General Law of Nature.* Four engraved plates (one folding). 8 p.l., 491 pp. 8vo, cont. speckled calf, flat spine gilt, red morocco lettering piece on spine. London: J. Johnson, 1788. \$1950.00

"The Second Edition, with very Large Additions" (1st ed.: 1779). This influential book, here in its "final and most valuable edition" (Neville), contains the first attempt to determine the specific heat of gases. It challenged the chemical theories of heat advanced by Black and Lavoisier.

Fine copy with the bookplate of Dunnichen Library.

D.S.B., XV, pp. 94-96. Garrison-Morton 591–(1st ed.)–"Earliest experiments upon animal calorimetry." Neville, I, p. 302. Partington, III, pp. 156-57.

29. CUVIER, Georges. *Rapport Historique sur les Progrès des Sciences Naturelles depuis 1789, et sur leur État actuel*. xvi, 394, [1] pp. 8vo, orig. pink wrappers, uncut. Paris: de l'Imprimerie Impériale, 1810. \$1500.00

First edition and a lovely copy in original state. Cuvier, at the instruction of Napoleon, prepared the present report detailing the advances made since the Revolution in many fields including chemistry (with much on Lavoisier), physics, meteorology, mineralogy, geology, physiology, medicine, and

agriculture. This book was issued under the aegis of the Académie des Sciences. Cuvier (1769-1832), was one of the first great historians of science. Fine copy.

30. DAEZEL, Georg Anton. *Ueber die zweckmässigste und zuverlässigste Methode grosse Waldung zu messen, zu zeichnen und zu berechnen*. Two folding engraved plates & one folding printed table. xiv, 82 pp. 8vo, cont. mottled half-sheep & paste-paper boards, spine gilt, contrasting vellum lettering pieces on spine. Münich: J. Lindauer, 1799.

[bound with]:

[ZANTHIER, Hans Dietrich von]. Das wohlgeübte und erfahrne Förster, Ein Beytrag zu H.W. Döbels Jägerpractica. Two folding printed tables. 2 p.l., 188 pp. 8vo. Leipzig: J.S. Heinsius, 1785. \$2250.00

First editions; both are very rare.

I. Däzel (1752-1847), was professor of forestry at Weihenstephan and later at the universities of Landshut and Münich. He developed new methods of mathematically assessing the value of forests and wrote many influential works on forest management. This book met with considerable success and a new edition, revised by Neebauer, appeared in 1819.

II. Zanthier (1717-78), was one of the leading German foresters of his time. After serving King Christian IV of Denmark, Zanthier became chief forester for Count Stolberg-Wernigerode and implemented many successful reforms in managing the Count's estates (see *A.D.B.* for a complete account). At Zanthier's recommendation, the Count established in 1764 in Ilsenburg the first forestry institute in Germany.

In this posthumously issued work, Zanthier criticizes the sections on forestry in Döbels *Jägerpractica*.

Fine copies from the library of Graf von Seinsheim with his engraved bookplate.

- Däzel: A.D.B., Vol. 4, pp. 688-89. Mantel, I, p. 21. Poggendorff, I, 509. Zanthier: A.D.B., Vol. 44, pp. 690-92. Mantel, I, 15.
- **31. (DARWIN FAMILY).** *Emma Darwin. A Century of Family Letters* 1792-1896. Edited by her Daughter Henrietta Litchfield. Plates. Two vols. 8vo, orig. cloth (a little tired). London: J. Murray, 1915. \$125.00

First edition. Emma Darwin (1808-96), was, of course, the wife and first cousin of Charles Darwin.

32. DIDOT, Firmin, publisher. *Livres du Fonds de Firmin Didot, Libraire pour l'Art militaire, les Mathématiques et l'Architecture, Graveur et Fondeur en Caractères, Membre de l'Académie des Beaux Arts de Berlin.* 1 p.l., 50 pp. 8vo, stitched as issued (a little frayed, some browning), uncut. Paris: 1791.

\$3250.00

Very rare. Firmin Didot (1764-1836), was a leading member of the great family of type founders, engravers, printers, and publishers. He invented stereotyping and was a distinguished bibliophile who formed a magnificent collection of rare books and manuscripts.

The present priced catalogue lists about 1000 publications of the Didot publishing house, arranged by subject, and with prices. It reflects Firmin's wide range of editions in many disciplines. Firmin also took over the stock of Louis Alexandre Jombert, who had either died or ceased operations at about this time, and many of his publications have been incorporated here.

Very good copy.

- BNF, Catalogues de libraires 1473-1810, 989.
- 33. ELVIUS, Petrus. De Eclipsibus Lunae Disputatio gradualis...[respondent] Petrus Erichsson...die 3 Aprilis, Anno MDCCVII. Woodcut diagram in the text. 23, [1] pp. Small 4to, modern paste-paper boards (minor cropping at foot to four leaves). Uppsala: J.H. Werner, 1707. \$2250.00

First edition and very rare; OCLC locates no copy in America. Elvius (1660-1718), professor of astronomy at Uppsala University, was one of the founders of the "Collegium Curiosum" (1710), the embryo of what later became the Royal Society of Sciences in Uppsala, the first scientific academy in Sweden. Elvius was the first in Sweden to lecture on Kepler's laws.

Apart from the cropping, a fine copy.

№ Lalande, p. 354.

A Bleaching Factory

34. ERXLEBEN, Christian Polykarp Friedrich. Die böhmische Leinwandbleiche beschrieben, mit den bekanneten älteren und neueren Bleichmethoden verglichen, und als die vorzüglichste dargestellt in einer erklärenden Beschreibung der Bleichmethode des Verfassers und dessen Leinwandbleiche zu Landskron. Nebst einem Anhange chemischer Versuche zur Berichtigung der Theorie des Bleichens. Four folding engraved plates. xii, 283, [1] pp. 8vo, orig. blue wrappers, entirely uncut. Vienna: C. Kaulfuss

& C. Armbruster, 1812.

\$1950.00

First edition of a very rare book. Erxleben was the owner of a bleaching factory in Landskron and this is a complete account of the materials, techniques, and machinery used there. He also discusses the methods of bleaching used in France, Holland, Ireland, and Westphalia.

The fine plates depict several views of Erxleben's factory and the equipment employed.

A very fine copy in original state.

- Ron, *Bibliotheca Tinctoria*, 356—"A thorough early 19th-century survey of the old European linen-bleaching methods, mostly by vegetable alkalis, lime, and steam, in German. These methods are compared not always favorably with the new methods, mainly chlorine."
- **35. EVERSMANN, Friedrich August Alexander**. *Technologische Bemerkungen auf einer Reise durch Holland*. Ten folding engraved plates. 2 p.l., 236 pp. Small 8vo, cont. marbled sheep, flat spine gilt, red morocco lettering piece on spine. Freiberg & Annaberg: Craz, 1792.

First edition of this rare work — OCLC locates no copy in the U.S. — describing the author's travels throughout the Netherlands during which he studied (and stole?) the latest technological developments which had taken place. Eversmann (1759-1837), German technologist and royal Prussian director of mining and manufacturing, was responsible for bringing the first steam engine to Prussia. He was instrumental in developing numerous industries in Prussia and it has been suggested he was active in industrial espionage.

The present book describes the various industries established throughout Holland, which include dyeing and bleaching, metallurgical processes, the trade in and cutting of diamonds, papermaking, textiles, etc., etc. The industrial activities of individual cities are described including those of Amsterdam, Antwerp, Rotterdam, and Leyden. Eversmann also describes a number of public natural history cabinets.

The handsome plates depict many of the machines and processes which are described in the book.

Fine copy with the stamp on title of the prominent French economist and technologist Comte Charles Philibert Lasteyrie du Saillant (1759-1849).

• A.D.B., Vol. 6, pp. 437-38.

A Rare Work on Tuscan Winemaking

36. FABBRONI, Adamo. Arte di fare il Vino per la Lombardia Austriaca. I Metodi pratici per fare i migliori Vini Toscani. In Risposta specialmente alle domande della Soc. Patriottica di Milano. Ma con regole generali adattabili ad

ogni possessione; e che può servir di seguito all' Arte di fare il Vino. Three finely handcolored folding engraved plates. 2 p.l., 74 pp., one leaf (a list of the author's other publications). 8vo, orig. semi-stiff boards (some foxing), uncut. Florence: G. Tofani, 1790. \$1650.00

First edition and very rare; no copy in OCLC. Fabbroni (1748-1816), agricultural economist, wrote a series of books on general agriculture, sericulture, and wine making. The present work — not to be confused with the second edition of his *Dell'Arte di fare il Vino* of the same year — deals specifically with wines of the Tuscan area. Fabbroni describes the different grapes of the area and methods of trellising, harvesting, filtering, and storing the wines.

The three finely handcolored folding plates depict irrigation techniques, trellising, and equipment to crush the grapes.

Some foxing but a fine copy in original state.

Brunet's Predecessor

37. FOURNIER, François Ignace. Dictionnaire Portatif de Bibliographie, contenant plus de 17,000 articles de Livres rares, curieux, estimés et recherchés...suivi du Catalogue des éditions cum notis Variorum, ad usum Delphini, et de celles imprimées par les Aldes, les Elzevirs, Baskerville, etc. 2 p.l., ii, viii, 404 pp., 1 leaf. 8vo, cont. green sheep-backed green boards (joints a bit rubbed), flat spine gilt. Paris: Fournier Frères, 1805. \$950.00

First edition, and a pretty copy, of the immediate predecessor to Brunet. In the Preface, Fournier "stresses his efforts to name the first editions of classical authors, to give titles correctly, and especially to include the titles in several famous series of editions of the classics and the list of works used for the Italian dictionary of the Accademia della Crusca. He thinks these efforts deserve particular commendation and claims that the *Nouveau Dictionnaire* is the first French bibliography to cite these Italian titles...Fournier was primarily interested in books attractive to collectors in 1809, that is to say, certain editions of the classics, standard theological treatises, editions of the Bible, and rare French books."—Taylor, *Catalogues of Rare Books*, pp. 35-36—(referring to the 1809 2nd ed.). Fine copy.

38. GMELIN, Johann Friedrich. *Einleitung in die Chemie zum Gebrauch auf Universitäten*. 4 p.l., 528 pp., 27 leaves. 8vo, cont. speckled boards. Nuremberg: G.N. Raspe, 1780. \$1950.00

First edition of one of the rarest chemistry books by Gmelin (1748-1804), a member of the distinguished scientific family, and professor, variously, of philosophy, medicine, chemistry, botany, and mineralogy at the University of

Tübingen. He is perhaps best known for his history of chemistry which is one of the standard books in the field.

The present work is a textbook of chemistry prepared for university students; it was one of the leading textbooks on the subject of the time.

Fine copy. Stamp on title of the Hochschule für Geisteswissenschaft, Dornach, Switzerland.

➡ Hirsch, II, pp. 776-77. Partington, IV, p. 180-81. Not in Cole, Neville, or Young collections.

A Notable Textbook of Mineralogy

39. GMELIN, Johann Friedrich. *Einleitung in die Mineralogie zum Gebrauch akademischer Vorlesungen*. 2 p.l., 380, [14] pp. 8vo, cont. speckled boards. Nuremberg: G.N. Raspe, 1780. \$2500.00

First edition of a very scarce textbook. The present work is a textbook of mineralogy prepared for university students; it was one of the leading textbooks on the subject of the time.

Fine copy. Stamp on title of the Hochschule für Geisteswissenschaft, Dornach, Switzerland.

Partington, IV, p. 180-81. Schuh, *Mineralogy & Crystallography: A Biobibliography, 1469 to 1920, 1918—*"Scarce. In this introduction to the mineralogical science, Gmelin concentrates on the systematic component. The text begins with a brief review of definitions, and then proceeds to a systematic representation of the known minerals. This classification is based largely on external characteristics with some chemical information included."

The College of Physicians Defended

40. GOODALL, Charles. The Colledge of Physicians Vindicated, and the true State of Physick in this Nation Faithfully represented: in Answer to a scandalous Pamphlet, entituled, The Corner Stone, &c. 7 p.l., 191, [6] pp. 8vo, cont. mottled calf (some light browning), spine richly gilt. London: R.N. for W. Kettilby, 1676. \$5500.00

First edition of an uncommon book. Goodall (1642-1712), was admitted to the College of Physicians as a candidate in 1676 and eventually became president from 1708 until his death. Early in 1676, Goodall published the present book which "is a reply to an attack on the college by Adrian Hyberts, and proves three points: that the College of Physicians was legally established, that it exercised its rights justly, and that it had advanced medical learning in England. The illustrations in support of the last show Goodall to have been well read in the science of his time." –D.N.B., VIII, p. 114.

Nice and pretty copy.

Gibson, Francis Bacon, A Bibliography, 410.

In a Pretty Contemporary Binding

41. GROBERT, Jacques François Louis. *Machine pour mesurer la vitesse initiale des mobiles de différens calibres, projettés sous tous les angles, depuis zéro jusqu'à la huitième partie du cercle*. Three folding engraved plates. viii, 59 pp. Large 4to, cont. panelled marbled calf, sides decorated with elaborate gilt tooling, flat spine richly gilt, red morocco lettering piece on spine. Paris: A. Bailleul & Magimel, 1804. \$2500.00

First edition, in an extremely pretty contemporary binding, of a scarce book. "Description of Grobert's machine to measure initial speed. He notes in the *avant-propos* that his machine operates on the same principle as that of Mathey, but that it differs in form and in the distribution of its parts. Grobert's pamphlet describes a machine designed to measure the initial speed of projectiles launched at angles from 0 to 45 degrees, and for all the calibers standard in the French artillery. Presented to the Institut National, the review by Monge, Bossut, and Prony is appended. Prony himself was involved in Grobert's experiments."—Roberts & Trent, *Bibliotheca Mechanica*, p. 150.

Grobert (1757-ca. 1814), a colonel in the French army who accompanied Napoleon to Egypt, was a member of several important scientific societies and the author of other books on artillery equipment and the art of fortification.

Fine and pretty copy. Stamp of "JVC" on free front endpaper.

Pyrites; "A Key Book"

42. HENCKEL, Johann Friedrich. *Pyritologia, oder Kieshistorie als des vornehmsten Minerals, nach dessen Namen, Arten, Lagerstätten, Ursprung, Eisen, Kupfer, unmetallischer Erde, Schwefel, Arsenic, Silber, Gold, einfachen Theilgen, Vitriol und Schmelznutzung...auch einer Vorrede vom Nutzen des Bergwerks*. Engraved frontis. & 12 engraved plates. 904 (incl. frontis.), [15] pp. 8vo, cont. half-sheep & speckled boards (sides a little rubbed), spine richly gilt, contrasting vellum lettering piece on spine. Leipzig: Gross, 1754.

Second and improved edition of one of the author's major works; it is "an encyclopedic study of the pyrites...His work on pyrites and other minerals exerted a strong influence on J.H. Pott, J.G. Lehmann, and others engaged in mineral analysis."—D.S.B., VI, p. 259. The first edition appeared in 1725 and there were later editions in 1757 and 1760.

"The most important work of the eighteenth century on pyrites and a key book in the history of chemistry and mineralogy in which the origins, deposits, and industrial uses of sulphide minerals are described."—Neville, I, p. 618–(lacking this edition).

Henkel (or Henckel, 1678-1744), town and mine physician of the famous

mining town Freiberg, had an extensive knowledge of mineralogy and wrote a series of "important" (Partington) books on chemistry and mineralogy. His annual course in metallurgical chemistry achieved renown throughout Germany and eastern Europe for its profundity and utility.

The attractive and charmingly primitive frontispiece depicts ore being transported from the mine to a smelting shed and other aspects of mining life. The plates depict pyrites in their various forms.

Fine copy.

- * Ferchl, pp. 225-26. Hoover 406. Partington, II, pp. 706-09. Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920 (in progress), 2156—"Very scarce."
- 43. HERMBSTAEDT, Sigismund Friedrich. Anleitung zu der Kunst wollene, seidene, baumwollene und leinene Zeuge ächt und dauerhaft selbst zu färben; desgleichen Leinewand und baumwollene Zeuge zu bleichen, und gedruckte Kattune und leinene Zeuge, so zu waschen, dass die Farben nicht zerstört werden. x, 114 pp. 8vo, orig. blue-grey wrappers, entirely uncut. Berlin: C.F. Amelang, 1815.

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. Hermbstädt (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 fine copy in original state. This copy lacks the two leaf publisher's ads at end.

- Partington, III, pp. 577-80. Poggendorff, I, 1082-83.
- 44. HUGGINS, Sir William & Lady Margaret. An Atlas of Representative Stellar Spectra from Lamda 4870 to 3300 together with a Discussion of the Evolution Order of the Stars, and the Interpretation of their Spectra. Preceded by a Short History of the Observatory and its Work. 12 plates. ix, 165 pp. Large 4to, orig. cloth (a little soiled). London: W. Wesley, 1899. \$2500.00

Extremely rare; one of the seminal publications in the history of astronomy by the founders of astronomical spectroscopy, who established that not all nebulae could be resolved into stars as had been assumed. It was a joint initiative by Sir William Huggins (1824-1910), President of the Royal Society from 1900-1905, and his Irish born wife, Lady Margaret (1848-1915), who was responsible for much of the tedious work in their private observatory at Tulse Hill in London, as well

for the artistic presentation of this large format book, printed on high quality paper.

This book "contains a history of the observatory, a comprehensive list of published papers, a description of the instruments used and the methods of observation, and an account of the later work of the observatory that had not been previously published elsewhere. There are twelve large plates, mainly of stellar spectra."—D.S.B., VI, p. 543.

Very good copy. A second volume was published in 1909.

An Important Work on Eudiometry

45. HUMBOLDT, Alexander von. *Versuche über die chemische Zerlegung der Luftkreises und über einige andere Gegenstände der Naturlehre*. Two engraved plates & four folding printed tables (each printed on both sides). 2 p.l., 258 pp. 8vo, cont. black boards (minor foxing), pale blue lettering piece on spine. Braunschweig: F. Vieweg, 1799. \$2500.00

First edition of an important work on eudiometry, containing valuable data on the composition of air and different gases (oxygen, carbon dioxide, nitrogen dioxide, and sulphur dioxide) and on the oxidation of phosphorus. At the end (pp. 255-58) is a letter by Humboldt to the brother of A.J. Garnerin, the first man to descend by parachute from a balloon (1797), on the analysis of air gathered by the latter 1300 meters above Paris.

Fine copy. Signature on free front-endpaper dated 13 June 1857 and stamp on verso of title of Dr. Schwarz.

Neville, I, p. 666. Poggendorff, I, 1157.

"The Existence of God Geometrically Demonstrated"

46. JACK, Richard. *Mathematical Principles of Theology, or, the Existence of God Geometrically demonstrated. In Three Books. Wherein is proved, the Existence of God from Eternity to Eternity; his Self-Existence, Independency, and Unity. That God is infinite in Wisdom, Power, Knowledge, &c. Also, That Matter is a temporary Being; that God is the Cause of its Existence, and of the Existence of all other Beings, that ever did, or can exist; and upon God the Continuation or Termination of their Existence depends. xxvi, 328 pp. 8vo, cont. polished calf, double gilt fillet round sides, spines richly gilt, red morocco lettering piece on spine. London: G. Hawkins, 1747. \$1950.00*

First edition and a lovely copy of this scarce book. Jack (d. 1759), mathematician and military engineer, lectured on natural and experimental philosophy, and also instructed in practical gunnery and fortification. He worked with George Adams in constructing a new type of refracting telescope

and a sea quadrant and served as an assistant engineer with the British expedition to Guadeloupe, which fell in May 1759. His mathematical library was sold in London in February 1760.

A very fine copy from the Macclesfield library.

№ ODNB.

Still Essential

47. JOECHER, Christian Gottlieb. *Allgemeines gelehrten-Lexicon*. Engraved frontis. port. of the author in Vol. I & one large engraved vignette. Titles printed in red & black. Four vols. Large thick 4to, cont. vellum over boards, spines lettered in gilt. Leipzig: J.F. Gleditsch, 1750-50-51-51.

First edition of the still essential bio-bibliographical dictionary; there are about 50,000 entries. Jöcher (1694-1758), was professor of philosophy and librarian at the University of Leipzig. The present book is his greatest work and continues to be of considerable use; it remains the only convenient place to find accounts of many obscure authors and their writings.

Fine set from the Bibliotheca Bibliographica Breslaueriana.

- Besterman 819.
- **48. [KLOTZSCH, Johann Friedrich]**. *Ursprung der Bergwerke in Sachsen, aus der Geschichte mittler Zeiten untersuchet*. Small engraved vignette on title & three larger engraved vignettes in the text. 8 p.l., 230 (i.e. 330), [10] pp., one leaf of errata. 8vo, cont. half-calf & speckled boards, spine gilt, contrasting vellum lettering piece on spine. Chemnitz: J.C. Stössel, 1764.

[bound with]:

[—]. Gedanken von der Erfindung des Bergwerkes zu Freyberg. 85 pp. Small 8vo. Chemnitz: J.C. Stössel, 1763.

[bound with]:

SPRENGEL, Joachim Friedrich. Beschreibung der Harzischen Bergwerke nach ihrem ganzen Umfange. Large engraved vignette on title. 32 p.l., 108, [2] pp. Berlin: im Verlag der Buchhandlung der Realschule, 1753.

\$3500.00

A most attractive *sammelband* of three works on the history of mining in Saxony, all in first editions.

I & II. Klotzsch (1726-89), a resident of the great mining center Freiberg, has written here two invaluable works on early mining in Germany. The first deals with the history of mining in Saxony in general. Saxony has been from Roman

times an area of great mining activity with silver, lead, tin, iron, and cobalt amongst its chief exports. Many early mining laws are printed. No copy in the U.S. according to OCLC.

The second work describes the earliest days of mining in Freiberg where silver and lead are the main products.

III. First edition of this valuable description of the current mining and refining activities of the Harz Mountains, with much historical information. Mining has been carried on there since the middle of the 10th century, especially for rich argentiferous lead, but gold, copper, iron, sulphur, alum, and arsenic are also found.

The author, a member of the Königlichen deutschen Gesellschaft at Göttingen and several other academic societies, describes, town-by-town, the mining activities, the varieties of jobs, production levels, etc.

Fine copies.

№ I & II: Ferchl, p. 277. III. Hoover 761.

A Rare Assaying Book

49. KURZE UND DEUTLICHE VORSTELLUNG der Edlen Probierkunst, Was eigentlich dieselbe sey, worinnen sie bestehe, was vor Instrumenten darzu erfordert worden, 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. 20 p.l. (incl. frontis.), 523 pp. Thickish 12mo, cont. vellum over boards. Nuremberg: J. Zieger, 1695.

First 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–(2nd edition of 1718 only).

Nice copy and very rare. The second edition of 1718 is also very uncommon. Bookplate of the "Bibliothek der Carlsburg."

- Darmstaedter, Berg-, Probir- und Kunstbüchlein, p. 102 & Ferchl, pp. 425-26-(both 1695 ed.). Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920, 3987.
- **50.** LA HIRE, Philippe. Memoires de Mathematique et de Physique, contenant un Traité des Epicycloïdes, & de leurs usages dans les Mechaniques. L'explication des principaux Effets de la Glace & du Froid. Une Dissertation des Differences des Sons de la Corde de la Trompette Marine. Un Traité des differens Accidens de la Vûe, divisé en deux Parties. Woodcut vignette on title &

numerous woodcut diagrams & illus. in the text. 4 p.l., 302 (i.e. 202) pp., 1 leaf. Large 4to, antique sheep, red morocco lettering piece on spine. Paris: de l'Imprimerie Royale, 1694. \$4500.00

First edition. La Hire (1640-1718), was for nearly half a century one of the principal animators of scientific life in France. Appointed to the chair of mathematics at the Royal College in 1682, he taught courses in mathematics (pure and applied), astronomy, hydrostatics, dioptrics, and navigation.

The present book reflects La Hire's wide interests. The first treatise contains his valuable essay on epicycloids and their application to mechanics. It is here that La Hire describes his discovery that a wheel with cycloidal teeth is most efficient because it creates least friction. The second treatise contains an investigation of the thermometer. La Hire was, at the end of the century, responsible for the meteorological observations at the Paris Observatory. The third memoir is concerned with an acoustical problem. The final treatise, divided into two parts, is devoted to optics and the mechanics of eyesight. His interest in physiological optics was caused by its role in astronomical observation and by its relationship to artistic technique.

Fine copy. Ex Bibliotheca Mechanica.

№ D.S.B., VII, pp. 576-79. Smith, Hist. of Mathematics, I, p. 386.

51. LAMARCK, Jean Baptiste. *Recherches sur les Causes des Principaux Faits Physiques*. One engraved plate & one folding printed table. xvi, 375 pp.; 2 p.l., 412 pp. Two vols. 8vo, cont. half-calf & marbled boards, spines gilt, red & orange leather lettering pieces on spines. Paris: Maradan, Seconde Année de la République [1794]. \$3000.00

First edition of the author's first book on chemistry. Lamarck (1744-1829), the noted biologist and evolutionist, had pronounced chemical theories and they were an important part of his ideas about nature and evolution. He was an adversary of Lavoisier's anti-phlogistic theory and proposed the four-element theory (earth, air, water, and fire). Lamarck believed that these four elements "have no attraction for one another but tend to separate unless constrained by force...He proposed a new 'pyrotic theory'."—Partington, III, p. 490. Lamarck attempted to account for a great number of chemical and physical phenomena such as sound, electricity, magnetism, color, and vaporization with his system.

"In this work Lamarck sets forth his views on the immutability of species and attacks the theory of the spontaneous origin of life. The book is interesting in the history of chemistry, because Lamarck attacks Lavoisier's anti-phlogistic theory."—Duveen, p. 334.

An uncommonly attractive set.

№ Cole 739.

Baron von Moll's Set

52. LA MÉTHERIE, Jean Claude de. *Théorie de la Terre*. Seven folding engraved plates. xvi, 422 pp.; viii, 456 pp.; viii, 471 pp. Three vols. 8vo, orig. blue-grey boards, uncut. Paris: Maradan, 1795. \$1650.00

First edition of the author's chief work, which enjoyed considerable popularity among his contemporaries; it was founded for the most part on Werner's teachings. "Taking a broad cosmogonical view of creation, Lamétherie regarded the major features of the earth as the result of the combined action of crystallization, moving water, and shifts in the planetary-motion characteristics of the earth."—D.S.B., VII, p. 604. This work was translated into German and enlarged by C.G. Eschenbach and Johann Reinhold Forster (Leipzig: 1797-98).

La Métherie (1743-1817), was chief editor of the famous *Journal de Physique* from 1785 until the year of his death. He wrote a number of important works on mineralogy and was a friend to many of the leading scientists of his time, especially Cuvier.

Fine set in remarkable original state with half-titles. With the bookplate in each volume of Baron von Moll.

≈ Zittel, pp. 77-78.

53. LEHMANN, Johann Gottlob. *Probier-Kunst*. Five folding engraved plates & three folding printed tables. lxxxvi, [4], 318, [14] pp. (two leaves of the index misbound). 8vo, cont. half-sheep & speckled boards, spine gilt, contrasting leather lettering piece on spine. Berlin: A. Weber, 1761. \$2500.00

First edition. Lehmann (1719-67), made notable contributions to geology, metallurgy, chemistry, and mineralogy. Considered to be the founder of stratigraphy, he discovered cobalt and tungsten and drew the first geological profile. He also founded the Freiberg Bergakademie which became so famous under the directorship of Werner. In 1761, Lehmann became professor of chemistry and director of the Imperial Museum at St. Petersburg.

The present book deals with modern assaying techniques. "Lehmann's work in chemistry — which, indeed, constituted the greatest part of his researches — is today primarily of historical value. In his studies of rocks and ores he sought to determine their composition and metallurgical properties, and he suggested a system of classification based upon chemical composition...He analyzed many minerals for the first time."—D.S.B., VIII, p. 147.

Fine copy. The plates depict assaying apparatus.

Partington, II, pp. 711-12.

54. [LE MONNIER, Pierre Charles] & FONTAINE DES CRUTES,

Pierre. Traité complet sur l'Aberration des Étoiles fixes, avec une Histoire générale de l'Astronomie, une Introduction au Systême du Monde, selon les principes de la Philosophie ancienne & moderne; suivies d'un Abregé de la Sphere & d'une méthode pour déterminer les différences en longitude des Villes & des Ports de Mer, en se servant de l'Occultation des Etoiles fixes par la Lune. Eight folding engraved plates & one engraved headpiece vignette. iv, one leaf of dedication, [v]-xxxii, 270, [2], one leaf of errata. 8vo, attractive antique calf, double gilt fillet round sides, spine nicely gilt, red morocco lettering piece on spine. Paris: G.F. Quillau, 1744. \$3000.00

First edition and very scarce; it is not generally known that the great French astronomer Le Monnier (1715-99), made substantial contributions to the present book.

Fine and handsome copy.

- Lalande, p. 423-"Le Monnier eut part à cet ouvrage; il contient encore quelques autres mémoires d'astronomie."
- **55. [LEMONNIER, Pierre Charles]**. *Observations du Passage de Vénus sur le Disque du Soleil*. Two woodcut diagrams in the text. 4 p.l., 32 pp. Large 4to, attractive antique calf-backed paste-paper boards, spine gilt, red morocco lettering piece on spine. Paris: Imprimerie Royale, 1761.

SOLD

First edition and rare of these "important" (*D.S.B.*) observations of the famous transit of Venus of 1761, one of the major astronomical events of the 18th century. Through the efforts of the Académie Royale des Sciences, the Royal Society of London, and other interested scientific groups throughout Europe and America, astronomical expeditions were dispatched to all parts of the world.

Lemonnier (1715-99), professor at the Collège Royal and a member of the Royal Society, the Berlin Academy, and the Académie de la Marine, accompanied Clairaut and Maupertuis on the 1736 expedition to Lapland to measure a degree of an arc of meridian. Lemonnier was one of the leading French astronomers and observers of the period.

Lemonnier made his observations of the transit at the Château de Saint-Hubert, west of Paris. Much of the text contains summaries of other observations made world-wide, including California, Mexico, and Beijing.

Fine copy.

D.S.B., VIII, pp. 178-80. See Woolf, *The Transits of Venus. A Study of Eighteenth-Century Science* (1959) for frequent references to Lemonnier.

56. LEONHARD, Karl Cäsar von, MERZ, Ernst Karl Friedrich, & KOPP, Johann Heinrich. Systematisch-tabellarische Uebersicht und Charakteristik der Mineralkörper. In oryktognostischer und orologischer Hinsicht. 3 p.l., xvi pp., 83 leaves, [84]-125 pp. (several leaves misbound). Folio, cont. marbled boards. Frankfurt am Main: J.C. Hermann, 1806.

\$2500.00

First edition and very rare; this is a systematic survey of minerals, in the form of tables, giving extensive descriptions of their external appearances and chemical qualities. Leonhard (1779-1862), professor of mineralogy at the University of Heidelberg, wrote the oryctognostic section, Merz (1776-1813), the orologic section, and Kopp (1777-1858), the chemical section.

"As a founding editor of the *Taschenbuch für die gesammte Mineralogie*, Leonhard earned a place among the foremost mineralogists of his time. His prolific writings contributed to the rise of popular interest in geology during the nineteenth century."—*D.S.B.*, VIII, p. 245.

Fine copy.

Poggendorff, I, 1427.

57. LEOPOLD, Johann Friedrich. *Relatio Epistolica de Itinere suo Suecico Anno MDCCVII facto. Ad... Johannem Woodward...* Eight folding engraved plates. viii (half-title misbound), 111 pp. 8vo, cont. polished calf, sides richly gilt, spine gilt, red morocco lettering piece on spine, a.e.g. London: T. Childe, 1720. \$2250.00

First edition of a rare book. Leopold (1676-1711), German naturalist and physician, studied at various German and Swiss universities and travelled throughout Europe and Britain. This, apparently his only book, is an account of his mineralogical tour of Sweden. Addressed to John Woodward (1665-1728), professor of physic at Gresham College, London and an important geologist, Leopold describes the various minerals and geological formations found throughout the country. This book must have been published with the support of Woodward.

The handsome plates depict minerals, geological formations, etc.

Very fine copy from the Macclesfield library.

№ Poggendorff, I, 1428. For Woodward, see D.S.B., XIV, pp. 500-03.

58. LEUPOLD, Jacob. *Theatrum Machinarum Hydrotechnicarum. Schau-Platz der Wasser-Bau-Kunst...* **51** folding engraved plates. Title in red & black. 6 p.l., 184, [4] pp. Folio, cont. speckled boards (some browning as

is usual). Leipzig: published by the Author & J.F. Gleditsch & Son, 1724. \$3500.00

First edition and a nice copy of the second volume of Leupold's *Theatrum Machinarum*, or "Theater of Machines"; this was the most complete and richly illustrated work on engineering and machinery published, not just up until that time, but for many years to follow. Complete sets of the nine works are of great rarity.

The *Theatrum Machinarum* may be described as the first encyclopedia of technology. Not only was it easily the most richly illustrated book of its kind, with many thousands of figures on 530 plates, but with more than 2000 pages of German text it eclipsed all other works in the field. It describes not only the design and construction of the machines themselves, but also the mechanical principles by which they operated. The author describe the machines of his predecessors Francesco di Giorgio Martini, Strada, Zonca, Böckler, and Zeising and also gives accounts of many of his own inventions.

This volume deals with marine engineering, including the construction of piers, docks, sluices, and wharves, embanking, draining, etc. It was the most complete work on the subject in its time. The fine plates illustrate methods of boring for water, raising it, conveying it, the design of interlocking or sheet-piles, their use in the construction of coffer-dams, driving piles, and bridging waterways.

Leupold (1674-1727), a Leipzig mechanical engineer, established a workshop to manufacture mathematical and mechanical instruments. His numerous books describe the latest technological developments of the day.

A very fine and tall copy.

The First Edition to be Revised

59. LINNAEUS, **Carl**. *Philosophia Botanica in qua explicantur Fundamenta Botanica cum Definitionibus Partium, exemplis Terminorum, Observationibus rariorum.*..Editio Secunda in gratiam Botanophilorum revisa et emendata. Curante D. Johanne Gottlieb Gleditsch. Engraved frontis. port. of Linnaeus & 11 folding engraved plates. 4 p.l. (incl. frontis.), 362 pp. 8vo, cont. boards (minor foxing). Berlin: F. Himburg, 1780.

\$1350.00

"Editio Secunda" (1st ed.: 1751). This work is essentially an elaboration of the *Fundamenta Botanica*. Our edition is the first to be revised and corrected. The editor was Johann Gottlieb Gleditsch (1714-86), director of the botanic garden at Berlin, and friend and correspondent of Linnaeus. Gleditsch did important experiments on the sexuality of plants (see Sachs, *History of Botany*, pp. 393-94).

Linnaeus "dictated with inexorable logic in *Philosophia botanica* how botanists should proceed in practice...[he] considered the *Philosophia botanica* to be a statute book spelling out the terminology and concepts to be used by botanists.

Logic and definitions of concepts were the true tools of botany."—D.S.B., VIII, pp. 377-78.

Very fine copy and scarce.

Pritzel 5426. Soulsby 445. Stafleu & Cowan 4760.7. Stearn 92.

60. LONDET, Louis André. *Instruments Agricoles, Machines, Appareils et Outils employés en Agriculture ; Description, Choix, Emploi, Manoeuvre, Conditions où ils conviennent, Avantages qu'ils présentent. Première partie* [all published]. 53 plates (of which 34 are folding) & several illus. in the text. 1 p.l., iv, 303, xxx, [2] pp. 8vo, cont. calf-backed marbled boards (upper joint with a small defect at head), flat spine gilt, black leather lettering piece on spine. Paris: Veuve Bouchard-Huzard, n.d. [but 1858].

\$1500.00

First edition of this very rare description of the French agricultural machines and tools which were exhibited at the Exposition Internationale of 1855. This volume unites a series of articles which had originally appeared in the *Annales de l'Agriculture française*. The range of machines and tools is amazing — from hoes to seeding machines to wagons to distilling apparatus — and each of the thousands of exhibits is fully described with invaluable information. We learn about minute differences in hoes, their inventors and manufacturers, prices, distributors, medal winners, members of the juries, etc.

The numerous plates depict the enormous range of machinery and tools. Fine copy. OCLC locates no copy in the U.S.

61. LUNADEI, Giovanni Battista. *Del Metodo d'innestare il Vajuolo Difeso, illustrato, renduto più universale, più comodo, più sicuro, e nello Stato Pontificio in parecchie centinaja di Fanciulli felicemente praticato...* Engraved vignette on title, one engraved headpiece, & one engraved initial. xvi, 152 pp., one leaf of imprimatur. Large 4to, cont. speckled vellum, red morocco lettering piece on spine. Urbino: "nell Stamperia della Ven. Cappella del SS. Sacramento," 1766.

First edition of this rare work on smallpox vaccination and public health. Lunadei took his medical degree at Bologna and was appointed first physician of Urbino and "Protomedico Generale" of the region. Because of his positions, he was much concerned with public health problems; smallpox was the leading infectious disease of the area.

This book contains a series of extended letters between Lunadei and local doctors regarding regional outbreaks of smallpox, largely amongst children. There is much discussion regarding inoculation which had long been known

and was just becoming popular in Europe.

Fine copy. Scarce.

№ Re the printer: Fumagalli, Lex. Typogr. Italiae 442—"Nous lui devons beaucoup d'éditions d'une grande valeur."

62. MAGALOTTI, Lorenzo. *Lettere Scientifiche, ed Erudite*. Engraved port. of the author & an engraved vignette on title. Title printed in red & black. xxiv, 303 pp. Large 4to, cont. vellum over boards. Florence: Tartini & Franchi, 1721. \$2250.00

First edition of this posthumously issued collection of letters by this famous scientist who has the distinction "of having written the best scientific prose in Italian after that of Galileo; his descriptions of experiments in physics are written in colorful, almost dramatic, language."—D.S.B., IX, p. 3. Essays include those on light (addressed to Viviani), Galileo, the effects of snow, the comet of 1664, horticulture and the culture of vines, the sense of smell, circulation of blood, and languages.

Magalotti (1637-1712), was one of the first ten members of the Accademia del Cimento and was its secretary. He studied with Viviani and attended lectures given by Malpighi and Borelli.

Fine copy.

Albrecht von Haller's Copy

63. MAGNOL, Pierre. Botanicum Monspeliense. Sive Plantarum circa Monspelium nascentium Index. In quo Plantarum Nomina meliora seliguntur: Loca, in quibus Plantae spontè adolescunt, tum à prioribus Botanicis, tum ab Authore observata indicantur: & praecipuae Facultates traduntur. Adduntur variarum Plantarum Descriptiones et Icones. Cum Appendice quae Plantas de novo repertas continet, & errata emendat. Four folding engraved plates & 19 full-page engravings in the text. 8 p.l., 309 pp. 8vo, cont. vellum-backed marbled boards (minor wear & rubbing to binding, small piece of corner of title renewed with loss of two or three letters). Montpellier: D. Pech for P. Marret, 1686.

First edition, second issue, and a precious copy, bearing the signature of Albrecht von Haller on the half-title: "Alb. Haller. Med. Cand. Lugd. Bat. 1726." This book was purchased by Haller, the great Swiss anatomist, physiologist, botanist, and bibliographer, while a medical student at Leyden, where he studied under Boerhaave and Albinus. On 23 May 1727, Haller graduated *doctor medicinae* from Leyden — at the age of 18 — with an important thesis on a

salivary duct which he proved to be a blood vessel.

This is the second issue of Magnol's first book. Our edition has been made up with the sheets of the first edition of 1676 with a new title page and an appendix added at the end (pp. 289-309).

Magnol (1638-1715), one of the greatest botanists of the 17th century and demonstrator of plants and later director at the Montpellier botanical garden, made important contributions towards a "natural" classification of plants and was the first to use the term "family" for plants. Magnol had contact with all the leading botanists of Europe. The magnolia is named for him.

Magnol's method of classification is evident in the present work where he recognizes 76 "families." In this work, Magnol describes the species of plants found in the area surrounding Montpellier.

Nice copy. Books from Haller's library are uncommon in the market.

Hunt 374. Pritzel 5739. Stafleu & Cowan 5230.

With Additional Texts

64. MARCANDIER, —. *Abhandlung vom Hanf, denen Manufacturiers, Kauf- und Handels-Leuten, und insgemein allen hohen und niedern Land- und Hauswirthen zur unentbehrlichen Nachricht und ungemeinen Nutzen,* aus dem Französischen des Herrn Marcandier übersetzt. Nebst freyen Auszügen anderer Schriften von der in Deutschland üblichen mannichfaltigen Cultur, Bearbeitung, Nutzen und Gebrauch dieser edlen Pflanze. 4 p.l., 166 pp. 8vo, attractive antique calf-backed speckled boards, spine gilt, red morocco lettering piece on spine. Freystadt: G. Hebold, 1763.

\$950.00

First edition in German (1st ed., in French: 1758) of this important book on the manufacture of hemp; the text was translated into English and Portuguese as well as the present German edition. This is a scholarly study of the history, manufacture, and use of hemp, largely based on early Greek and Roman sources. There are practical sections describing its cultivation, preparation, dyeing, and the commerce in hemp. Marcandier has included important discussions of new procedures for washing, bleaching, dyeing, and finishing the product.

This present edition is noteworthy for gathering and editing additional original German texts on the subject.

Fine copy and rare.

See Ron, Bibliotheca Tinctoria, 711 for the French first edition.

Bound in Grey Silk for Duke Wilhelm von Birckenfeld

65. MAYER, Christian. Basis Palatina...exeunte anno superiore 1762 ad norman Academiae Regiae Parisinae Scientiarum exactam bis Dimensa hoc

demum anno 1763 novis mensuris aucta et confirmata recentissimisque Observationibus et calculis stabilita... 12 p.l., 23, [2] pp. Large 4to, orig. grey silk over boards (a bit frayed), a.e.g. Mannheim: ex Typographeio Electorali-Aulico, [1763]. \$1500.00

First edition and rare. Mayer (1719-83), was professor of mathematics and physics at Heidelberg University. In 1762, Karl Theodor, the Elector Palatine, constructed for Mayer an astronomical observatory at Schwetzingen, the elector's summer residence. Later, in 1772-74, a second and larger observatory was erected at Mannheim, equipped with instruments from the best British workshops. At both observatories, Mayer did important astronomical and geodetic research.

The present work describes Mayer's measurement of the geodetic base in the plain of the Rhenish Palatinate.

A very fine copy with the contemporary signature of Duke Wilhelm von Birckenfeld. From the library of the Dukes and Electors of Bavaria.

≈ *D.S.B.*, IX, pp. 231-32. Lalande, p. 483.

66. MENSING, Johann Gottlieb Wilhelm. Leichtfassliche Anleitung zu stöchiometrischen Rechnungen besonders für angehende Chemiker und Pharmaceuten...mit einer Vorrede von Dr. J.B. Trommsdorff. xii, 292 pp. 8vo, cont. mottled polished calf, single gilt fillet round sides, flat spine gilt. Erfurt: Maring, 1824.

First edition and very rare. Mensing (1792-1864), son-in-law of the prominent chemist Trommsdorff who was professor of chemistry and physics at Erfurt, taught mathematics and physics at Halle and Erfurt. Stoichiometry is a branch of chemistry that deals with the relative quantities of reactants and products in chemical reactions. In a balanced chemical reaction, the relations among quantities of reactants and products typically form a ratio of whole numbers. Stoichiometry rests upon the very basic laws that help to understand it better, i.e., the law of conservation of mass, the law of definite proportions (i.e., the law of constant composition), and the law of multiple proportions.

Very fine and pretty copy. Trommsdorff has provided a Foreword.

Poggendorff, II, 119. Not in the usual chemistry bibliographies or histories.

The Art of Etching

67. MEYNIER, Johann Heinrich. *Anleitung zur Aetzkunst, besonders in Crayon und Tuschmanier nach eigenen praktischen Erfahrungen herausgegeben*. Twelve folding engraved plates printed in black or in reddish-brown.

viii, 230, [2] pp. 8vo, cont. marbled boards. Hof: G.A. Grau, 1804.

\$2250.00

First edition of this rare handbook on the art of etching with special attention given to the techniques reproducing imitations of drawings and aquatint methods. The work is extensively illustrated with plates depicting various types of etching needles and rolls and other etching equipment including metal plates, "ground," mordants, paper, and ink with examples of how they are used. The technical plates are printed in black and the four examples depicting samples of finished images using different techniques are printed in reddish-brown ink. Meynier also describes techniques especially used in France and England.

Nice copy.

Bigmore & Wyman, II, p. 40.

A Fine Copy of the First Treatise on Optics Published in English

68. MOLYNEUX, William. Dioptrica Nova. A Treatise of Dioptricks in Two Parts. Wherein the Various Effects and Appearances of Spherick Glasses, both Convex and Concave, Single and Combined, in Telescopes and Microscopes, Together with Their Usefulness in many Concerns of Humane Life, are Explained. 43 folding engraved plates. 8 p.l., 301, [1] pp., one leaf of ads. 4to, attractive modern crushed morocco (minor browning), double gilt fillet round sides, spine gilt, red morocco lettering piece on spine, a.e.g. London: B. Tooke, 1692.

First edition and a lovely copy of the first treatise on optics published in English. This was for many years the standard work in Britain. "It was intended as a complete and clear account of current optical knowledge independent of any hypotheses concerning the nature of light. Appended to it was Halley's famous theorem for finding the foci of lenses. A popular text, it was reprinted in 1709 and provided a scientific base for Berkeley's *Essay Towards a New Theory of Vision*. The book was widely distributed, and Molyneux personally sent copies to Newton, Halley, Locke, Hooke, Boyle, Flamsteed, and Huygens. Its publication ended his friendship with Flamsteed, who, according to Molyneux, took umbrage at the lack of prominence accorded his work…

"In the dedicatory epistle, Molyneux lavishly praised Locke's *Essay Concerning Human Understanding*; Locke's letter thanking him initiated a lengthy correspondence that was ended only by Molyneux's death in 1698."—D.S.B., IX, p. 465.

"The first part presented 59 propositions on geometrical optics, providing a thorough treatment of the nature of sight and the properties of lenses, telescopes, microscopes, and magic lanterns. The second part consisted of a series of chapters on topics including refraction and light, glasses for defective eyes, and telescopic instruments. In treating refraction, Molyneux highlighted

Leibniz's seminal essay of 1682, which marked the beginning of the famous dispute about the principle of least action, or Fermat's principle. He warmly approved of Leibniz's refutation of Descartes' explanation of refraction, and embraced the German's doctrine of final causes. Refraction and the finite velocity of light led Molyneux to conclude that 'Light is a Body.' For certain propositions Molyneux gave the solutions of Flamsteed in addition to his own, but the publication led to a breach between the two, with Flamsteed taking offence probably because the manuscript was not shown to him before publication but entrusted instead to his rival Halley."—ODNB.

Molyneux (1656-98), studied at Trinity College, Dublin, and founded the Dublin Philosophical Society, which emulated the Royal Society of London.

A fine and crisp copy with none of the browning and foxing to the plates which is so common to other copies. Complete with the imprimatur and advertisement leaves.

Kemp, The Science of Art, p. 235. King, The History of the Telescope, pp. 56, 96, & 112.

69. HAUPT CONSERVATORIUM DER ARMEE, Münich. *Catalog über die im Königlich Bayer'schen Haupt*. *Conservatorium der Armee befindlichen gedruckten Werke* [with]: *Supplement I, II, III, IV*. xiv, [2], 422, 59, [1] pp.; 168, 34 pp., one leaf of errata; 190, 54 pp.; 179, 62 pp.; 181, 62 pp. Five vols. 8vo, various bindings (see below), a.e.g. Munich: 1834-44-55-67-77.

A fine and handsomely bound set of the main library catalogue, with four supplements, of the Haupt Conservatorium der Armee in Munich, the chief library and archive of the Bavarian Army. These volumes come from the library of the Kings of Bavaria and are well-bound in a variety of styles, reflecting the changing bookbinding tastes of the 19th century.

The library was founded in 1804 as the archives of the Bavarian Army, with responsibility to collect and preserve all battlefield plans, maps, manuscripts, and books. About 17,000 items are described in the main catalogue (which is in its second edition) and the supplements.

The first volume is bound in fine contemporary half-calf with the crown of the Kings of Bavaria on the spine at the head and in the lower compartment. The first supplement is bound in contemporary green sheep, imitating morocco, with the spine gilt in the romantic style. The second supplement is bound in contemporary blind-stamped cloth. Supplements III and IV are bound in contemporary blind-stamped red morocco, each employing different patterns.

Fine set and scarce.

Schwenke, Adressbuch der Deutschen Bibliotheken, 1105.

The First Description of the Pyrometer

70. MUSSCHENBROEK, Petrus van. Tentamina Experimentorum Naturalium captorum in Academia del Cimento...quibus Commentarios, Nova Experimenta, et Orationem de Methodo Instituendi Experimenta Physica addidit... Thirty-two folding engraved plates & one folding printed table. Title in red & black. 8 p.l., xlviii, [12], 193 pp.; 192, [14] pp. Two parts in one vol. Large 4to, cont. calf (joints very slightly rubbed), spine nicely gilt, contrasting morocco lettering piece on spine. Leyden: J. & H. Verbeek, 1731.

First edition. This book contains the first description of the pyrometer, an instrument for measuring the expansion of solid bodies under the influence of heat. Like many of Musschenbroek's books, the *Tentamina* contains fine illustrations and is concerned with experiments in measuring humidity, magnets and electricity, air pressure, the structure of ice, heat and cold, capillarity, optics, the motion of sound, etc.

Musschenbroek (1692-1761), professor of natural philosophy and mathematics at Utrecht and, later, professor of experimental physics at Leyden, was one of the most celebrated physicists and most important investigators of his time. The experiments described in his books have become classics in elementary instruction. "Underlying Musschenbroek's lectures demonstrated with experiments was the experimental philosophy...the principal source of inspiration was Newton, but Galileo, Torricelli, Huygens, Réaumur, and others were important to this school."—D.S.B., IX, p. 596.

A fine and handsome copy.

Wheeler Gift Cat. 276.

A Classic of Experimental Science

71. MUSSCHENBROEK, Petrus van. *Cours de Physique Experimentale et Mathematique...* traduit par M. Sigaud de la Fond... Sixty-five folding engraved plates (including a map) & one folding engraved table. xlviii, 472 pp.; 2 p.l., [4], 510 pp.; 2 p.l., 503, [1] pp. Three vols. Large 4to, cont. polished mottled calf (covers with a few inoffensive abrasions), spines nicely gilt, red & green morocco lettering pieces on spines. Paris: P. Fr. Didot le jeune, 1769.

First edition in French and a very attractive set. "The first volume of this important text-book on natural philosophy contains one hundred closely printed pages on electricity and magnetism; references frequently given. The translator was himself a distinguished physicist."—Wheeler Gift Cat. 427. This extension of Musschenbroek's Utrecht lecture notes covers many areas of physics including gravity, mechanics, elasticity, hydraulics, light, optics, and celestial mechanics.

Musschenbroek (1692-1761), professor of natural philosophy and mathematics at Utrecht and, later, professor of experimental physics at Leyden, was one of the most celebrated physicists and most important investigators of his time. The experiments described in his books have become classics in elementary instruction. "Underlying Musschenbroek's lectures demonstrated with experiments was the experimental philosophy...the principal source of inspiration was Newton, but Galileo, Torricelli, Huygens, Réaumur, and others were important to this school."—D.S.B., IX, p. 596.

72. NAGEL, Heinrich von. *Theoretisch-praktischer Unterricht zur Seiden-Kultur in Baiern*. vi, [2], 152 pp. 8vo, orig. red patterned boards, gilt decoration round sides, a.e.g. Munich: Lentner, 1824. \$950.00

First edition of this very rare book — no copy in the U.S. according to OCLC — concerning the development of the silk industry in Bavaria. Earlier efforts to establish the industry in this area in the 17th century were unsuccessful. Nagel, a cameral official in Bavaria, describes the silkworm, sericulture, diseases, and the manufacture of silk.

Very fine copy from the Kings of Bavaria.

73. NAGEL, Heinrich von. *Die ermunterte Seidenzucht in Bayern und ihre Fortschritte mit Hinblick auf auswärtige Staaten. Nebst einem Anhange: Gemeinnützige Bemerkungen bei der Erziehung der Seidenraupen.* Two folding lithographed plates. vii, [1], 152 pp. 8vo, orig. pale purple boards, gilt decoration round sides, a.e.g. Munich: Lentner, 1824. \$1250.00

First edition of this rare book concerning the development of the silk industry in Bavaria. Earlier efforts to establish the industry in this area in the 17th century were unsuccessful. Nagel describes the history of the silk industry in Bavaria, France, England, Austria, Prussia, and Sweden. The author also furnishes many details on proper methods of sericulture.

The two folding lithographed plates depict tools used in sericulture. Very fine copy from the Kings of Bavaria.

Three of His Most Important Collections of Writings

74. NEUMANN, Caspar. Lectiones Publicae von Vier Subjectis Chimicis, Nehmlich vom Salpeter, Schwefel, Spiess-Glas und Eisen, wie solche bey dem in Berlin gestiffteten Königl. Collegio Medico-Chirurgico abgehandelt worden. 7 p.l. (lacking a blank leaf), 440 pp. 4to, cont. smooth vellum over boards.

Berlin: J.G. Michaelis, 1732.

[bound with]:

— . Disquisitio de Ambra Grysea . . . sammt einem Kurtzen Vorbericht solcher Memoire halber, Anietzo, weil wenigen Personen die Engländische Transactiones Philosophicae vorkommen, in deutscher Sprache pobliciret, von Einem Liebhaber der Historiae Naturalis. 8 p.l., 116 pp. 4to. Dresden: G.C. Hilschern, 1736.

[bound with]:

— . Lectiones Publicae von Vier Subjectis Pharmaceutico-Chemicis, nehmlich vom Gemeinem Saltze, Weinstein, Salmiac und der Ameise, wie solche bey dem in Berlin gestiffteten Königl. Collegio Medico-Chirurgico abgehandelt worden. 4 p.l., 379, [1] pp. 4to. Leipzig: G.B. Frommann, 1737. \$5500.00

A very attractive sammelband of three of Neumann's most important collections of writings. Neumann (1683-1737), "studied pharmacy, travelled with the king as his apothecary, and also at his expense in Germany, Holland and England, where he resided for five years. He returned to Berlin, made fresh journeys to England, France and Italy, was appointed Court apothecary and afterwards professor of practical chemistry in the Medico-Chirurgical College, and in 1724 he was made supreme surveyor of the apothecaries in Prussia. He was a member of the Royal Societies of London and Berlin . . .

"He published his prelections at the request of his friends, so that the scope of his teaching might be known. He was an energetic and successful chemist."—Ferguson, II, p. 137.

As Court apothecary, he took on the demanding job of running one of Europe's busiest pharmacies.

I. First edition of Neumann's lectures on saltpeter, sulphur, antimony, and iron.

II. First edition of his notable work on amber. There are a number of references to the researches on the nature of amber undertaken in Boston by Boylston, Atkins, and Prince.

III. First edition of Neumann's lectures on salts, cream of tartar, sal-ammoniac, and formic acid; very rare with no copy in *N.U.C.*, OCLC, or RLIN.

Fine copies. With two contemporary engraved armorial bookplates — "Ex Bibliotheca Kleiniana" and "Ex Bibliotheca Gralathiana."

№ D.S.B., X, pp. 25-26. Ferguson, II, pp. 136-37. Partington, II, pp. 702-06.

The Dedication Copy

75. OWEN, Edward. *Observations on the Earths, Rocks, Stones and Minerals, for some Miles about Bristol, and on the Nature of the Hot-Well, and the Virtues of its Water*. Engraved frontis. & two engraved plates. Title printed in red & black. 6 p.l., 250 pp. 8vo, cont. calf (upper cover with

several scrapes), double gilt fillet round sides, spine gilt, red morocco lettering piece on spine. London: W. Johnston, 1754. \$2500.00

First edition of this uncommon and detailed work on the geology surrounding Bristol. This is the dedication copy, with the printed dedication from Owen to the Earl of Macclesfield dated 12 March 1754.

The fourth chapter — pages 119-162 — is devoted to a description of the famous "Hot-Well" waters which emanate from various springs surrounding Bristol. These mineral waters, very popular in London, were used to treat diabetes, obstructions of urinary passages, and lung diseases.

Very good copy.

76. PEIGNOT, Gabriel. Catalogue d'une Partie des Livres composant la Bibliothèque des Ducs de Bourgogne, au XVe Siècle. Seconde Édition revue et augmentée du Catalogue de la Bibliothèque des Dominicains de Dijon, rédigée en 1307, avec détails historiques, philologiques et bibliographiques. 143, [1] pp. 8vo, cont. calf-backed marbled boards (joints rubbed, head & foot of spine with tiny defects), spine gilt, contrasting leather lettering piece on spine. Dijon: V. Lagier, 1841.

Second edition, revised and enlarged (the first edition was published in 1830 in one hundred copies only).

Fine copy.

№ Brunet, IV, 468.

For the auction catalogue of Peignot's library, please see item 9

The Beginnings of Modern Comparative Anatomy

77. **[PERRAULT, Claude]**. *Description Anatomique d'un Cameleon, d'un Castor, d'un Dromadaire, d'un Ours, et d'une Gazelle*. Fine woodcut vignette on title & five fine folding engraved plates. 120 pp. 4to, fine antique calf, spine nicely gilt. [Paris: F. Leonard, 1669]. \$6500.00

First edition of the second publication of the "Parisians," a famous group of anatomists in Paris; their publications mark the beginnings of modern comparative anatomy. "The constitution of the French Academy of Science in 1666 established a school of morphology to which the modern development of comparative anatomy may be directly traced... The longevity of the early Parisian anatomists was remarkable... Their leader was the veteran Claude Perrault... it was due mainly to his influence that a number of the early members of the French Academy, who are often conveniently referred to in the literature of the period as the 'Parisians', laid the foundations of our modern knowledge of comparative anatomy."—Cole, A History of Comparative Anatomy, pp. 393-95 (&

see pp. 393-425).

The leading members of the "Parisians" were, beside Perrault, Guichard Joseph Duverney, Jean Pecquet, Moyse Charas, and Philippe de la Hire.

"In June 1667 the Academy was invited to dissect a thresher shark and a lion which had died at the royal menagerie. The reports on these dissections were the first of a long series of anatomical descriptions, which ultimately included those of twenty-five species of mammals, seventeen birds, five reptiles, one amphibian, and one fish...

"Although some of the discoveries on which the Parisians most prided themselves — including the nictitating membrane that Perrault first observed in a cassowary, the external lobation of the kidneys in the bear, and the castoreal glands of the beaver — had been observed earlier, no such detailed and exact descriptions and illustrations had been published before."—D.S.B., X, pp. 519-20. Fine copy.

"Amongst the Earliest English Contributions to the Literature of Civil Engineering"

78. PERRY, John. *An Account of the Stopping of Daggenham Breach: With the Accidents that have attended the Same from the First Undertaking...To Which is Prefix'd, a Plan of the Levels which were over-flow'd by the Breach.* One large folding map. 131 pp. 8vo, cont. mottled calf (expertly rebacked), double gilt fillet round sides, spine gilt, red morocco lettering piece on spine. London: B. Tooke for J. Peele, 1721. \$2500.00

First edition of the chief account of the heroic struggles, led by Perry, to close the breach in the artificial banks which kept the tidal water of the Thames out of the low-lying Dagenham and Havering levels. "The closing of Dagenham Breach on the north bank of the River Thames downstream of London was one of the most difficult and most celebrated feats of early civil engineering. The [artificial] river wall was breached in 1707 and although attempts had been made to close it, no one succeeded until Perry. By the time he turned his attention to the task, the gap was about 100ft wide and the channel more than 30ft deep, and was severely affecting the navigation of the river. This is his own account of the method he used, which was entirely successful, and the book itself is amongst the earliest English contributions to the literature of civil engineering."—Elton, *Cat. 16*, 122.

After meeting Czar Peter in 1698, Perry (1670-1732), went to Russia where he oversaw numerous naval and engineering works during a 14-year period.

Fine fresh copy. Armorial bookplate.

№ D.N.B., XV, pp. 921-22.

"A Landmark Work"

79. PORTERFIELD, William. *A Treatise on the Eye, the Manner and Phaenomena of Vision.* Eight folding engraved plates. 1 p.l., xxxi, [3 – blank], 450 pp., one leaf of errata; xxxv, 435 pp. Two vols. 8vo, cont. speckled calf (tiny chip to head of Vol. II), spines gilt, contrasting leather lettering pieces on spines. Edinburgh: A. Miller et al., 1759. \$3950.00

First edition, and a lovely set, of the "first important British work on the anatomy and physiology of the eye."—Garrison-Morton 1484.2. Porterfield (ca. 1696-1771), took his M.D. at Rheims and by 1721 was practicing in Edinburgh where he became professor at the University. He devoted himself chiefly to research on the physiology of vision, reporting his experiments and observations in the present work. His treatise was especially influential in directing the attention of Thomas Young toward the problems of vision and of light and color.

№ Albert, Norton, & Hurtes, Source Book of Ophthalmology, 1836—"A landmark work."

Ceramic Experiments; A Complete Set

80. POTT, Johann Heinrich. *Chymische Untersuchungen welche fürnehmlich von der Lithogeognosia oder Erkäntniss und Bearbeitung der gemeinen einfacheren Steine und Erden ingleichen von Feuer und Licht handeln.* 3 p.l., 88, 44, [13] pp. 4to, cont. blue boards (foot of spine a little defective). Berlin: C.F. Voss, 1757.

[bound with]:

—. Fortsetzung derer Chymischen Untersuchungen, welche von der Lithogeognosie, oder Erkäntniss und Bearbeitung derer Steine und Erden specieller handeln. 4 p.l., 120 pp. 4to (light foxing). Berlin & Potsdam: C.F. Voss, 1751.

[bound with]:

—. Zweyte Fortsetzung derer Chymischen Untersuchungen welche von der Lithogeognosie oder Erkäntniss und Bearbeitung derer Steine und Erden in Anwendung derselben zur Bereiting feuerfester Gefässe und Tiegel specieller handeln nebst Tabellen über all drey Theile. One engraved plate depicting a furnace. 7 p.l., 148 pp. (minor foxing). Berlin: C.F. Voss, 1754. \$2500.00

Second edition, enlarged, of the first work and first editions of the final two works; a complete set. 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.

These three works are concerned with Pott's attempts to duplicate the porcelain manufactured at Meissen; they became a *vade mecum* of the ceramists and the most popular treatment of the fundamentals of the subject. Pott made over 30,000 experiments with all kinds of materials subjected to heat in an improved furnace of his own design. His elaborate tables of reactions recorded here are a notable contribution to chemical analysis "in the dry way" and greatly advanced chemical theory.

The Chymische Untersuchungen (1757) is greatly expanded by the first printing of the Neuer Anhang sur Lithogeognosie followed by a comprehensive index to all three works.

The plate depicts the furnace use by Pott in his attempts to make porcelain. Nice set. Engraved bookplate of the "Conventus Viennensis in Rossaugia."

№ Ferguson, II, pp. 221-22. Neville, II, pp. 329-32. Partington, II, pp. 717-22. Sinkankas 5227.

A Revolutionary Discovery

81. RAMOND DE CARBONNIÉRES, Louis François Elisabeth, Baron. *Voyages au Mont-Perdu et dans la Partie adjacente des Hautes-Pyrénées...* Folding engraved frontis. & five folding engraved plates. iv, 392 pp. 8vo, cont. polished calf, triple gilt fillet round sides, flat spine richly gilt, green morocco lettering piece on spine. Paris: Belin, 1801.

\$2500.00

First edition. Ramond (1755-1827), is considered to be one of the founders of geology in France. "In the summer of 1797 Ramond attempted to reach the summit of Mont-Perdu (now Monte Perdido, in Spain) in the central Pyrenees, which he erroneously believed to be the highest peak of the range...The summit was not reached, but the party made the unexpected discovery of abundant fossil remains of marine shells in the limestone strata at an altitude of about 10,000 feet...

"He published a new account of his several journeys in the Pyrenees in *Voyages au Mont-Perdu* (Paris, 1801)...Ramond's researches in the Pyrenees have received little notice in the histories of geology and botany, but his discovery of abundant fossils in calcareous sediments at a great altitude was undoubtedly a momentous one. At that time it was widely thought that the highest mountains were composed of granite, 'the oldest work of the sea,' and other 'primitive' rocks; against them lay steeply inclined non-fossiliferous bedded rocks, chemically deposited or derived by erosion from the primitive mountains. Fossiliferous sediments, horizontally bedded or gently inclined, were believed to be confined to a lower level. These ideas, first clearly stated by Pallas, had

been accepted and taught by Werner in Freiberg. Thus, Ramond's discovery was a revolutionary one, which required new explanations of geological structures."—*D.S.B.*, XI, pp. 272-73.

A very fine and pretty copy of a rather uncommon book.

≈ Zittel, pp. 102-03.

First Spanish Book on Intravenous Injections

82. RODRIGUEZ, Antonio José. Dissertaciones Physico-Mathematico-Medicas sobre el gran Problema de la Respiracion, y Modo de introducir los Medicamentos por las Venas: con una Pieza de Historica Philosophica... One engraved plate. Title-page printed in red & black. 16 p.l., 367 pp. 4to, cont. limp vellum, remains of two (of four) orig. ties. Madrid: M. Martin for F.M. de Mena, 1760. \$4500.00

First edition of the first Spanish book on intravenous injections. Rodriguez (1703-77), was a prominent and remarkable Spanish Cistercian monk who participated in a number of medical innovations and debates in his native country. Known as one of the most learned of Spanish monks of the 18th century, he was a member of a number of Spanish scientific societies. In the present work, Rodriguez provides a history of the late 17th-century experiments with blood transfusions and describes the techniques currently used in Spain.

The attractive plate depicts an actual intravenous injection.

Fine copy. Rare.

₩ Hirsch, IV, p. 844.

83. RUDBECK, Nicolaus. Disputatio de Motu Fixarum, nec non Quinque Planetarum Saturni Jovis Martis Veneris & Mercurii. Quam...ex consensu...Nicolai Rudbeckii...publico examini sistit...Samuel Schult...respondente Jacobo D. Westhio. [6] leaves. Small 4to, attractive antique red morocco, panelled in gilt. Arosiae [Vasteras, Sweden]: B. Hagenius, 1674.

First edition of this very rare astronomical work; there is no copy in OCLC or Collign.

Fine copy.

A Lovely Copy in Original State

84. SAUSSURE, Horace Bénédict de. Essais sur l'Hygrométrie. Ier. Essai. Description d'un nouvel Hygrometre comparable. II. Essai. Théorie de l'hygrométrie. III. Essai. Théorie de l'évaporation. IV. Essai. Application des théories précédentes à quelques phénomenes de la météorologie. Two engraved plates (one folding) of apparatus. xxiv, 367 pp. Large 4to, orig. boards,

uncut. Neuchatel: S. Fauche, 1783.

\$2250.00

First edition of an important work in the history of meteorology; this is a splendid copy in original state. In this book, Saussure (1740-99), describes his hygrometer, an instrument which measures humidity; outlines the general principles of hygrometry as a science; and deals with evaporation and the applications of his researches to meteorology. Cuvier regarded this book as one of the greatest contributions to science made in the 18th century.

Fine and fresh copy.

Middleton, Invention of the Meteorological Instruments, pp. 101-08.

Plastic Surgery

85. SCHOENBERG, Jorgen Johan Albrecht von. Sulla Restituzione del Naso. Rapporto fatto a sua Eccellenza il Signor Capitan Generale Conte Laval de Nugent... Six folding engraved plates (each somewhat foxed, one with some offsetting). 4 p.l., 60 pp., 1 leaf. Large 4to, cont. green sheep-backed marbled boards (some foxing), flat spine gilt, red morocco lettering piece on spine. Naples: dalla Reale Tipografia della Guerra, 1819. \$3950.00

First edition of this rare report on plastic surgery, describing and illustrating the different methods of rhinoplastic operations in use for the reconstruction of a lost nose, including the Indian method introduced by Carpue, the Italian method invented by Tagliacozzi, and the German method as practiced by C.G. von Graefe. This book was written by the Danish physician Schönberg (1782-1841), the "distinguished" (Hirsch) director of the Ospedale della Pacella in Naples. It was issued at the request of the commander of the army of the King of Sicily.

The present book can be considered a preview of Graefe's *Rhinoplastik*, the first great treatise on plastic surgery after Tagliacozzi and Carpue, which was published in Germany the same year.

Good copy.

№ Gnudi & Webster, p. 508. Hirsch, V, pp. 119-20. Zeis 860.

86. SCHULTZ, Gustav. *Farbstofftabellen*...Siebente Auflage neu bearbeitet und erweitert von Dr. Ludwig Lehmann. lvi, 764 pp.; vii, 445 pp. Two vols. Small thick folios, orig. cloth, spines gilt. Leipzig: Akademische Verlagsgesellschaft, 1931-32. \$500.00

Seventh edition, revised and enlarged, of the standard German work of the period on dyeing. Nearly 1500 recipes are provided, along with each dye's name in various languages, uses for each dye, literature concerning each dye, atomic

diagrams, the names of the discoverers, etc. The authors consider both organic dyes made from plants and minerals as well as aniline dyes. The amount of detailed information contained in these volumes is amazing.

Fine set.

"An Excellent Concise Textbook"

87. SPIELMANN, Jacob Reinbold. *Institutiones Chemiae praelectionbius Academicis adcommodate*. Woodcut vignette on title & one folding engraved table. 7 p.l., 309, [59] pp. 8vo, cont. sheep (head of spine a bit worn), spine richly gilt, contrasting leather lettering piece on spine. Strasbourg: J.G. Bauer, 1763. \$1750.00

First edition of this rare textbook of chemistry and pharmacology which was highly regarded in its time and went through many editions and translations. Spielmann (1722-83), a pupil of Pott, Marggraf, Henckel and Geoffroy, studied medicine at the University of Strasbourg where he graduated in 1748. He obtained a professorship of chemistry in 1749 and of medicine in 1759. Together with Baumé he was the chief supporter of the theory that fixed alkalis are only formed by the action of fire. Goethe was one of Spielmann's students.

An appealing feature of this book is the *Syllabus Auctorum* at the end which is actually a bibliography of chemistry, listing more than 200 authors and the different editions of their works.

Very good copy.

№ Cole 1240–(with a good note). Duveen, p. 558–(listing only later eds.). Ferguson, II, pp. 393-94. Neville, II, p. 502. Partington, II, pp. 689-90–"an excellent concise textbook."

"His Greatest Single Medical Work"

88. STAHL, Georg Ernst. Theoria Medica Vera. Physiologiam & Pathologiam, tanquam Doctrinae Medicae partes vere contemplativas, e Naturae & Artis veris Fundamentis, Intaminata ratione, & inconcussa expientia sistens. Engraved frontis. port. Title printed in red & black. 4 p.l. (incl. frontis.), 1432 pp., [21] leaves (the first a blank). Thick 4to, cont. vellum over boards. Halle: Literis Orphanotrophei, 1708. \$2950.00

First edition and a very fine copy. "Stahl influenced the whole of eighteenth-century medicine; and his imprint is being increasingly appreciated as historians trace his role in the drama of eighteenth-century medical thought...his greatest single medical work which provides in quite massive detail his doctrines of physiology and pathology, and presents his animistic philosophy as incidental to the exposition."—D.S.B., XII, p. 605.

A very fine copy from the library of the Solms ducal library at Lich with their

early stamp on title.

→ Garrison-Morton 69 & 582—"Stahl tried to explain vital phenomena by mystical means. He was the head of the so-called Animistic School which explained disease as caused by misdirected activities on the part of the soul."

One of His Rarer Books

89. STAHL, Georg Ernst. Einleitung zu der Neuen Meteroscopie oder Witterungs-Deutung, nach William Cocks Grund-Regeln und Tit. Herrn Matthaei Schlüters,...curieusen Anmerckungen, wodurch auch jeder gemeiner Mann, ohne einige Schwierigkeit, aus denen in gemeinen Calendern verzeichneten Adspecten, von erfolgenden Witterungs-Aenderungen, mit grosser Gewissheit, und zuverlässigen Erfolg, zu urtheilen erlernen kan. Engraved vignette on title & two engraved plates on one folding sheet. Title printed in red & black. 8 p.l., 515, [229] pp. 8vo, 18th-cent. speckled boards (head of spine a little worn). Halle: in Verlegung des Wäysenhauses, 1716.

First edition and quite rare. While Stahl (1660-1734), is best known for his contributions to medicine and chemistry, he also wrote on other subjects, including meteorology. The present work includes the meteorological observations of William Cock, from his *Meteorologiae* (1671), and Matthäus Schlüter for the years 1694-1700 and 1704-05.

Fine copy.

90. SUCKOW, Friedrich Wilhelm Ludwig. *Vademecum für Naturaliensammler, oder vollständiger Unterricht Säugethiere, Vögel, Amphibien, Fische, Käfer, Schmetterlinge, Würmer, Pflanzen, Mineralien, Petrefacte etc. zu sammeln, zu conserviren und zu versenden*. Three folding lithographed plates. 2 p.l., 189, x pp. Small 8vo, orig. brown boards (several leaves at end rather foxed), uncut. Stuttgart: P. Neff, 1830.

\$1500.00

First edition of this uncommon work on taxidermy. Suckow (1770-1838), a member of the distinguished family of scientists, was director of the natural history museum at Mannheim and a member of a number of natural history societies. The present book would have been an essential work for those on research expeditions and in all natural history museums as well as amateurs.

The plates depict instruments used in taxidermy and methods of mounting the specimens.

Apart from the foxing, a fine copy.

• A.D.B., Vol. 37, pp. 106-07.

91. SUCKOW, Georg Adolph. *Anfangsgründe der ökonomischen und technischen Chymie*. Fine engraved vignette on title of two putti in a chemical laboratory. Seven large folding printed tables (they are actually counted as pp. 663-76). xvi, 717, [1] pp. 8vo, cont. half-sheep & pastepaper boards, spine gilt, contrasting leather lettering piece on spine. Leipzig: Weidmann, 1789.

[with]:

—. Zusätze… 2 p.l., 202 pp. 8vo, binding as above. Leipzig: Weidmann, 1798. \$2250.00

Second edition, enlarged, of the first volume, accompanied by the first edition of the supplementary volume. Suckow (1751-1813), a member of the famous family of scientists, was professor of physics, chemistry, and natural history at the University of Heidelberg. He wrote many books and articles on chemistry, natural history, botany, and mineralogy.

"This extensive work on industrial and technical chemistry is in two parts. The first part covers theory...and the second treats applied or practical chemistry...The second section is divided into parts on vegetable, animal and mineral substances. In addition to numerous bibliographical notes in the text is the six page bibliography of chemistry including both books and periodicals."—Cole, p. 519 (describing the 1st ed. of 1784).

Fine and attractive set. Finely engraved contemporary bookplate of "Le Comte de Seinsheim."

№ *A.D.B.*, Vol. 37, pp. 105-06. Ferchl, p. 523. Ferguson, II p. 417 (an incomplete copy). Neville, II, p. 528–"Rare." Neville's copy lacks the supplementary volume. Poggendorff, II, 1046-47.

One of the Best Editions of Theophrastus

92. THEOPHRASTUS. *De Historia Plantarum Libri Decem, Graece & Latine. In quibus Textum Graecum variis Lectionibus, emendationibus, hiulcorum supplementis: Latinam Gazae versionem nova interpretatione ad margines: totum Opus absolutissimis cum Notis tum Commentariis: item rariorum Plantarum iconibus illustravit.* Finely engraved title-page (a trifle shaved at outer edge) & 675 woodcuts in the text. 10 p.l. (incl. engr. title), 1187 (i.e. 1185), [87] pp. Folio, cont. Dutch vellum over boards (head of spine somewhat worn, foot of spine with a tear repaired), panelled in blind, central arabesque in blind to each cover, remains of green silk ties. Amsterdam: H. Laurentius, 1644.

First edition to be edited by Joannes Bodaeus à Stapel; it "is one of the best and most thoughtfully prepared of all the editions of Theophrastos."—Hunt 240.

H.H. Bartlett wrote in his Fifty-five Rare Books (Ann Arbor: 1949) of this edition:

"It is interesting not only because of the brilliance of the editing, but, curiously enough, to the American botanist as well, for involving in the discussion certain species from Virginia, other parts of the New World, and Asia. The illustrations of these plants have been largely overlooked in botanical history, because of their incidental presence in a work which might not be expected to contain anything of the sort. Some were merely borrowed from l'Escluse or de Lobel, but others seem to be original in this work."

A fine and crisp copy.

▶ D.S.B., XIII, pp. 328-334. See Garrison-Morton 1783.

93. UTTENHOFER, Kaspar. *Judicium de nupero Cometa Astrologo-Historicum. Kurtzer Bericht und Erklärung...* Woodcut vignette on title of the comet passing through the constellations. Title within typographical border. [48] pp. Small 4to, modern boards. Nuremberg: S. Halbmayer, 1619.

First edition of this very rare work on the famous comet of 1618-19 which attracted so much attention from the leading astronomers of the time, including Galileo and Scheiner. While part of the text is astrological, the balance is scientific, in which the author describes the path of the comet and its appearance, discusses the observations of fellow astronomers, and provides an historical account of other comets' appearances.

Uttenhofer (d. 1621), a resident of Nuremberg, was a mathematician and instrument maker. He wrote several other books on sun dials and mathematical instruments.

Fine copy. Bookplate of Marcel Destombes.

№ Lalande, p. 175. Zinner 4792. Zinner, *Astronomische Instrumente des 11. bis 18. Jahrhunderts* p. 568.

94. VAUCHER, Jean Pierre Étienne. *Monographie des Orobanches*. 16 finely handcolored folding lithographed plates. 2 p.l., [ii], 72 pp. Large 4to, orig. printed wrappers (some foxing), entirely uncut. Geneva: G. Ficke, 1827. \$1250.00

First edition of this beautifully illustrated monograph on broomrape, a genus of over 200 species of parasitic herbaceous plants in the family *Orobanchaceae*. It is a parasitic plant, tapping nutrients from many other species of plants.

Vaucher (1763-1841), a founding member of the Société de Physique et d'Histoire Naturelle of Geneva, was honorary professor of botany at the University of Geneva. His most important work was his observation and interpretation of conjugation and spore formation in algae.

The sixteen lithographed plates are here very beautifully handcolored.

According to Pritzel, copies were issued with or without coloring. Fine copy in original state.

D.S.B., XIII, pp. 595-96. Pritzel 9707.

95. WALLERIUS, Johann Gottschalk. Mineralogie, oder Mineralreich, von Ihm eingeteilt und beschrieben. Ins Deutsche übersezt von Johann Daniel Denso. One folding engraved plate. 24 p.l., 600, [32] pp. 8vo, cont. speckled sheep (head of spine a bit worn, two small wormholes in lower outer margin in first 40 leaves), spine richly gilt, red leather lettering piece on spine. Berlin: C.G. Nicolai, 1750.

First edition in German. This is Wallerius' "first great work, which was received as an outstanding handbook of contemporary knowledge; never before had such a wealth of minerals been presented so systematically. Wallerius' clear and precise descriptions, which gave more weight to essential chemical properties than to exterior appearance, opened a new epoch in mineralogy. The book became widely known in Europe through translations into German, French, Russian, and (later) Latin, and served as a model for later works."—D.S.B., XIV, p. 144. First published in 1747 in Stockholm.

Wallerius (1709-85), predecessor of Tobern Bergman in the chair of chemistry at Uppsala, applied chemistry with great success to agriculture and made numerous investigations into the composition of mineral, vegetable, and animal substances.

▶ Partington, III, pp. 169-72. Schuh, *Mineralogy & Crystallography: A Biobibliography*, 1469 to 1920, 4878—"Very scarce."

Gas for Light & Heat

96. WINZLER, Zacharias (or Zachaus) Andreas. Die Thermolampe in Deutschland; Oder, vollständige, sowohl theoretisch- als praktische Anleitung, den ursprünglich in Frankreich erfundenen, nun aber auch in Deutschland entdekten Universal- Leucht- Heiz- Koch- Sud- Destillir- und Sparoven zu errichten. Four folding engraved plates. 10 p.l., 227, [3] pp. 8vo, cont. blue boards, contrasting vellum lettering piece on spine. Brünn: F.K. Siedler, 1803.

First edition of this early and comprehensive study of the thermolamp and oven. It is based on the revolutionary design by Philippe LeBon, who, in 1799, had patented a method of distilling gas from wood and thus invented one of the first gas lights, called a thermolamp. Because of a general shortage of wood, the thermolamp was designed to resolve the energy problems of the time, providing lighting, heating, and energy for the house and factory.

"Zachaus Andreas Winzler (1750-ca. 1830), a Moravian chemical manufacturer living in Austria, who also derived his ideas from Lebon, gave a number of

dinner-parties in December 1802, at which the food was cooked on a gas stove and the dining-room was heated by gas. In 1803 he published a detailed account of his methods [the present book]. His retorts were based on the conventional laboratory equipment of the day... there are spaces for heating cooking-utensils. The gas was bubbled through water (lime was not added) and could be passed to a cooker with four burners and a small oven behind, or to a holder in the form of a bellows with a small weight on top. From the holder the gas could be led to a room, where it was used both to warm a radiator and in Argand lamps."—Singer et al., eds., A History of Technology, Vol. IV, p. 264.

Winzler gives a very thorough description of the workings and construction of the thermolamp, fully illustrated on the plates. He clearly plans widespread applications, pointing out the usefulness of the design for hospitals, factories, and military barracks. He also indicates its uses in popular entertainment, through the installation of festive lights.

Fine copy and very rare. According to OCLC, no copy in the U.S.

* W. Schivelbusch, Lichtblicke, Zur Geschichte der künstlichen Helligkeit im 19. jahrhundert, Munich 1983, p. 27ff.

97. WOLFF, Christian, Freiherr von. Mathematisches Lexicon, darinnen die in allen Theilen der Mathematick üblichen Kunst-Wörter erkläret, und zur Historie der Mathematischen Wissenschafften dienliche Nachrichten ertheilet... Engraved allegorical frontis. & numerous woodcut diagrams in the text. Title printed in red & black. 8 p.l. (incl. frontis.), 1494 cols., [29] leaves of index. 8vo, cont. vellum over boards. Leipzig: J.F. Gleditsch, 1716.

\$3000.00

First edition of this noteworthy and scarce mathematical dictionary by Wolff (1679-1754), the famous mathematician and philosopher who was professor at the University of Halle and an ardent exponent of the philosophical ideas of his friend Leibniz.

This is a very complete and comprehensive dictionary of mathematics in the widest sense, including also astronomy, physics, mechanics, architecture, music, etc., etc. There are several quite interesting sections on calculating instruments including the abacus, Napier's rods, etc.

A fine and fresh copy. Contemporary ownership inscription on title.

- D.S.B., XIV, pp. 482-84. Smith, History of Mathematics, I, pp. 501-02.
- **98. WOLFF, Christian, Freiherr von**. Cosmologia generalis, Methodo Scientifica pertractata, qua ad Solidam, in primis Dei atque Naturae, cognitionem via sternitur. One folding engraved plate. Title printed in red & black. 8 p.l., 448, [16] pp., one leaf of errata. Small 4to, cont. sheep

(several scuff marks), spine gilt. Frankfurt & Leipzig: Renger, 1731. \$1500.00

First edition of one of the author's most important books. Wolff's cosmological principles "emphasize the rational connections between things, given as sequences or coexistences; these formal themes were later directly echoed in Kant's writings. The visible world is a machine, operating in accordance with the laws of motion: almost one-third of the *Cosmologia generalis* treats these laws."–*D.S.B.*, XIV, pp. 483-84.

Nice copy.

99. WOLFF, Christian, Freiherr von. Meletemata Mathematico-Philosophica cum erudito Orbe Literarum Commercio communicata. Quibus accedunt Dissertationes Variae eiusdem Argumenti et complura omnis eruditionis alia hinc illinc disperse obvia. Five folding engraved plates. Title printed in red & black. 6 p.l., 380 pp.; 211 pp. Two parts in one vol. Small 4to, cont. sheep (a bit rubbed), spine gilt, contrasting leather lettering piece on spine. Halle: Renger, 1755.

First edition of one of the author's most important books, posthumously published. This collection of hitherto unpublished letters, "meditations," and dissertations by Wolff reflect his varied interests. Included are a biography of Leibniz, a long discussion of Chinese philosophy, "De theoria colorum Newtoniana," a number of mathematical, astronomical, and philosophical essays, monographs on barometers, etc., etc.

Nice copy of one of Wolff's scarcer important books.

▶ D.S.B., XIV, pp. 483-84.

A New System of Mineralogy Based on Chemistry

100. WOLTERSDORFF, Johann Lucas. Systema Minerale in quo Regni Mineralis Producta Omnia systematice per Classes, Ordines, Genera et Species proponuntur. 60 pp. Oblong 4to, cont. half-sheep & speckled boards (corners a bit worn), spine gilt, red morocco lettering piece on spine. Berlin: Real-Schule, 1755. \$2950.00

Second edition, "von dem Verfasser selbst vermehrte und verbesserte Auflage"; this is a very rare book. The first edition appeared in 1748. Woltersdorff (1721-72), was a clergyman in Berlin; as a hobby he formed a large mineral collection.

"In attempting to organize his mineral collection in 1740, Woltersdorff found difficulties in the prevailing systems of Gesner, Woodward, and Scheuchzer. He there after developed his own method which is an early attempt to classify

species by chemical composition. The text presents this classification in a series of tables in Latin and German. The major divisions are earths, stones, salts, hard earths, semimetals, metals and petrifications."–Schuh, *Mineralogy & Crystallography: A Biobibliography, 1469 to 1920* (in progress), p. 1531.

Fine copy. With the characteristic red stamp on verso of title of August Ferdinand, Graf von Veltheim (1741-1801), an important mining official in the Harz Mountains and the author of a number of mineralogical and mining works. He formed an important scientific library and they all seemingly have survived in fine condition.

№ Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920–"Rare. The text is in double columns of Latin and German." Wilson, The History of Mineral Collecting 1530-1799, p. 91–"Among the German clergy, Johann Woltersdorff (1721-1772) is most famous because of his work on systematic mineralogy published in 1748."