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Catalogue 190

Proofs

Science, Medicine, Natural History,

& Bibliography

With a Special Section on Early German Forestry

(Items 27-47)

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Selective Subject Index

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Catalogue 190

1. (AUCTION CATALOGUE: BEAUVARLET, Jacques Firmin).
Catalogue de Tableaux la plupart de Peintre de l'École Française, tels que le Vouet, la Hyre, L. de Boullongne, Raoux, Detroy, le Moyne, Restout, Colin de Vermont, Ch. Coypel, Natoire, Boucher, les Vanloo, les deux de Lagrenée, Cazanova, Wille, Callet, Leroi, etc.; autres de Peintres d'Italie et des Pays-Bas; Dessins et Estampes montés et en feuilles; Figures et Bustes en marbre blanc par le Lorrain, Cafferi, Groupes, Figures et Bustes en bronze, Vases, Fût des colonnes... Porcelaines du Japon; Pendules, Lustres et Girandoles en bronze doré, Meubles de marqueterie, et autres objets curieux; Fonds de Planches gravées, etc. après le décès du C.en Beauvarlet, Graveur. By François Léandre Regnault-Delalande. viii, 42 pp. 8vo, attractive antique speckled calf-backed speckled boards, spine gilt, red morocco lettering piece on spine. Paris: F.L. Regnault, Poulthier, & Silvestre, An VI [1798]. \$2250.00

The very rare sale catalogue of the inventory of paintings, engravings (many by Beauvarlet himself), and art objects formed by the engraver and dealer Beauvarlet (1731-97).

Beauvarlet was a draughtsman, engraver (etching/burin), print publisher. He came to Paris when he was very young, and trained with Charles Dupuis and Laurent Cars. He quickly earned a reputation as a skilled engraver. His work is characterised by fine, fluid, deft strokes of the burin. He was granted the title of Engraver to the King and, on 25 May 1776, made a member of the Académie

Royale."—Benezit, I, p. 1434.

The preliminary pages contain a valuable biography of Beauvarlet.

Fine copy. The sale, consisting of 241 lots plus one added in manuscript, commenced on 13 March 1798. A few prices in a contemporary hand have been added.

• Cicognara 4555. Lugt 5726.

*A Notable Early Collection of Voyages;
With the Printed Price List*

2. **(AUCTION CATALOGUE: COURTANVAUX).** *Catalogue des Livres de la Bibliothèque de feu François-César Le Tellier, Marquis de Courtanvaux, Capitaine-Colonel des Cent-Suisses, dont la Vente se fera . . . le Lundi quatre Mars, et jours suivans . . .* Woodcut arms on title. xvi, 368, 361-434, 24 pp. 8vo, cont. calf, spine gilt, red morocco lettering piece on spine. Paris: Nyon, 1782. \$2500.00

This scarce sale catalogue describes the notable collection of voyages formed by Courtanvaux; it was one of the largest collections on the subject ever formed and practically amounts to a bibliography of the subject. The sections on natural history and the sciences are also very rich.

Courtanvaux (1718-81), a member of the Académie des Sciences, performed research in chemistry, geography, natural history, physics, and mechanics. A man of considerable wealth, he sponsored the voyage made in 1767 by Pingré and Messier during which Pierre Le Roy's marine chronometers were tested.

Fine copy. 3599 lots. The printed price list, issued after the sale and found in a few copies only, is present here. With the half-title.

• Grolier Club, *Printed Catalogues of French Book Auctions . . . 1643-1830*, 295. Peignot, p. 92—"Ce catalogue est précieux par la collection de voyages qui s'y trouve."

The Fruit of Two Generations of Collectors

3. **(AUCTION CATALOGUES: HARLEY, Edward, Earl of Oxford).** *A Catalogue of the Collection of the Right Honourable Edward Earl of Oxford decess'd: Consisting of several Capital Pictures by the most Eminent Italian, French, and Flemish Masters, great Variety of Greek and Roman Antiquities in Urns, Edicts, Inscriptions, &c. as also of Busto's and Bronzes; together with several very scarce Books of Prints and Drawings; particularly of the most famous Altars, Vestments, Chalices, &c. by J. Paulo Panini and others; collected*

by the late Mr. Talman; the King of France's Cabinet complete; the Heads of the most eminent Men in Europe in 30 Volumes; with divers other valuable Curiosities out of the Arundel Collection: Which will be sold by Auction, by Mr. Cock, At his House in the Great Piazza, Covent-Garden, on Monday the 8th of March, 1741-2, and the five following Days... Finely engraved frontis. by Vertue. 18 pp. Large 4to, late 19th-cent. green half-morocco & marbled boards, t.e.g., others uncut. [London: 1742].

[bound & issued with]:

(—). *A Catalogue of Greek, Roman and English Coins, Medallions and Medals, of the Right Honourable Edward Earl of Oxford, deceas'd*, Which will be Sold by Auction, By Mr. Cock, At his House in the Great Piazza, Covent-Garden, On Thursday March the 18th, 1741-2, and the Five following Days. 28, 33-50 pp. Large 4to, t.e.g., others uncut. [London: 1742]. \$4500.00

The rare sale catalogues of the important art and coin collections formed by Robert Harley, Prime Minister and first Earl of Oxford and Mortimer (1661-1724), and his son Edward, second Earl (1689-1741). Both father and son were great collectors, most notably of books and manuscripts. The scale of the Harleys' collecting careers can be judged by the final record: antiquities, coins, medals and portraits, together with 50,000 printed books, 41,000 prints and some 350,000 pamphlets which were auctioned off. In 1753 their incomparable collection of 7,639 volumes of manuscripts and 14,230 original rolls, charters, deeds and other legal documents was sold to the nation by Edward's daughter for the modest price of £10,000 (and now form one of the foundation collections of the British Library). Edward Harley nearly bankrupted himself by his mania for collecting.

These two sales caused a sensation. Nearly all the leading men of the day, including Horace Walpole, attended or were represented at this sale. The prices varied from five shillings for an anonymous bishop's "head" to 165 guineas for Vandyck's group of "Sir Kenelm Digby, lady, and son."

Both catalogues have been priced throughout with buyers' names in a contemporary hand. Walpole's name appears frequently as a purchaser. The first catalogue is printed on large paper.

The frontispiece in the first volume is very finely engraved and depicts a library room with paintings and *objets* scattered about.

Fine copies.

☛ Lugt 553 & 554. ODNB (on-line).

4. (AUCTION CATALOGUE: JOURSANVAULT, J.B.A.G.). *Catalogue analytique des Archives de M. le Baron de Joursanvault, contenant une précieuse Collection de Manuscripts, Chartes et Documens originaux au Nombre de plus de Quatre-vingt mille concernant l'Histoire générale de France — l'Histoire particulière des provinces — l'Histoire de la noblesse et l'Art héraldique...* Two folding facsimiles. xiv, 373 pp.; 2 p.l., 298 pp. Two vols. 8vo, orig. blue printed wrappers (a little frayed), uncut. Paris: Techener, 1838.
\$500.00

This was one of the greatest of all sales of early French manuscripts and historical documents. Baron Joursanvault, of Beaune, began collecting before 1789 and the disruptions caused by the Revolution allowed him to take advantage of many remarkable situations, especially during the dispersals of monastic archives. 3638 lots.

☛ Not in Blogie.

*The Most Important Collection of the 18th Century;
With the Rare Supplement & Printed Price List*

5. (AUCTION CATALOGUE: LA VALLIÈRE). *Catalogue des Livres de la Bibliothèque de feu M. le Duc de la Valliere. Première Partie contenant les Manuscrits, les premières Éditions, les Livres imprimés sur vélin & sur grand papier, les Livres rares, & précieux par leur belle conservation, les Livres d'Estampes, &c. dont la Vente se fera dans les premiers jours du mois de Décembre 1783.* Engraved frontis. port., one folding engraved plate, & three (of four) folding engraved facsimiles. Three vols. 8vo, cont. mottled sheep (short cracks at head of two joints), spines gilt, red morocco lettering pieces on spines. Paris: G. De Bure, 1783. \$2750.00

An attractive set of the celebrated catalogue of the first part of the most important book and manuscript collection of the 18th century. The catalogue, prepared by De Bure and Van Praet, contains MSS., noteworthy incunabula, and books printed on vellum or large paper. The sale, consisting of 5668 lots, made the enormous sum of 464,677 liv. 8 s.

“The manuscripts constitute an amazing collection of early French poetry and romances.”—Taylor, *Book Catalogues*, p. 248.

This has the *Supplément* (x, 90 pp.) to the first part; it is very rare and is usually found only in large paper sets. Additionally, this set has the very rare printed price list (42, [1] pp.). The engraved facsimile plate at page 80 of Vol. II was never bound in.

Very good set with half-titles.

☛ Brunet, II, 554. Peignot, pp. 128-29. Pollard & Ehrman no. 297.

Mac-Carthy-Reagh's Duplicates

6. **(AUCTION CATALOGUE: [MAC-CARTHY-REAGH]).** *Catalogue des Livres rares et précieux du Cabinet de M.L.C.D.M [Mac-Carthy-Reagh]* par Guillaume De Bure, fils aîné. La Vente se fera dans le courant du mois du Janvier 1780. ix, [3], 164 pp. 8vo, self-bound, stitched as issued. Paris: G. De Bure, 1779. \$2950.00

The catalogues of the duplicates from the extraordinary library of Justin, Comte de Mac-Carthy-Reagh (1744-1811). The sale was occasioned partly by his acquisition of the second collection of Girardot de Préfond. Amongst the duplicates are illuminated MSS., books printed on vellum (a favorite of the Count), and large paper editions of the classics. 1375 lots, priced throughout in a contemporary hand.

Bound-in at the end is a 16-page catalogue issued by De Bure entitled "Catalogue des Livres en feuilles."

Fine copy and rare, preserved in a box.

7. **(AUCTION CATALOGUE: REUVENS, Caspar Jacob Christian).** *Bibliotheca Reuvensiana.* Compiled by Conradus Leemans. Title with lithographed port. of the collector. 3 p.l., lxxv, [8], 408 pp., one leaf of ads. 8vo, modern calf-backed marbled boards (first & last few leaves a little browned), uncut. The Hague: S. & J. Luchtmans and C.C. van der Hoek, 1838. \$1250.00

This sale catalogue is tantamount to a bibliography of Greek and Roman archeology and literature published up to that time. Reuvs (1793-1837), son of an eminent Dutch jurist, originally studied the law but switched professions and became professor of Greek, Latin, and archaeology at Leyden.

The compiler of the catalogue, Leemans, has provided a valuable 75-page biography of Reuvs. 6,234 lots of books, 86 lots of prints, 79 lots of manuscripts, and 98 portrait busts and bookcases.

Very good copy.

• N.B.G., Vol. 12, cols. 63-64.

8. **(AUCTION CATALOGUE: TITE, Sir William).** *Catalogue of the extensive, important and valuable Collection of Books, Manuscripts, Autograph Letters, and Engravings... which will be sold by Auction, by Messrs. Sotheby, Wilkinson & Hodge... on Monday, the 18th of May, 1874... 1 p.l., 288 pp. Large 8vo, orig. printed wrappers bound in, cont. dark green*

half-morocco, cloth sides, spine gilt, t.e.g. London: 1874. \$850.00

A handsome copy, ruled in red with prices and buyers' names in a contemporary hand. Tite was a noted architect whose principal work was the remodeling of the Royal Stock Exchange (1844). He was a strenuous opponent of the Neo-Gothic style as practiced by Sir George Gilbert Scott (see *D.N.B.*). "Among the contemporaries of Henry Huth was a notable bibliophile, the enthusiastic architect Sir William Tite (1798-1873), whose fine and valuable library brought nearly £20,000, a large sum for the early 'seventies. Tite owned a choice series of Shakespeare Quartos, mainly from the Halliwell sales, a number of English Bibles and Prayer Books, often completed in facsimile with deceptive skill, a few excellent illuminated MSS, and some scarce autographs. Most of Tite's rare books bear his signature or manuscript notes on the fly-leaf."—*De Ricci*, p. 154.

This was one of the best architectural libraries of the time.

9. BARBA, Alvaro Alonso. *Berg-Büchlein, Darinnen Von der Metallen und Mineralien Generalia und Ursprung, wie auch von derselben Natur und Eigenschaft, Mannigfaltigkeit, Scheidung und Fein-machung, imgleichen allerhand Edalgesteinen, ihrer Generation etc. ausführlich und nutzbarlich gehandelt wird...* in Teutsch übersetzt von I.L.M.C. One engraved plate. 2 p.l., 128, [2], 129-204, [4] pp. 8vo, attractive antique calf-backed speckled boards, spine gilt, red morocco lettering piece on spine. Hamburg: G. Schultz, 1676. \$2500.00

First edition in German and a rather scarce book (1st ed., in Spanish: 1640). "In 1588, Barba (1569-ca. 1640), was sent by the Church to Peru... *El Arte* was the first significant treatise on metals to be written in Spanish and is the only seventeenth-century treatise that was largely original... It went through approximately thirty editions in Spanish, English, German, and French...

"Barba excelled in his account of the treatment of silver ores by amalgamation, using processes that he himself had discovered and that were in large measure responsible for the wealth of the province... Barba was one of the first writers to advocate what amounts to a laboratory control of an entire plant process as well as the computation of all costs (including fuel, mercury, additives, depreciation of equipment, and labor) before undertaking an operation. He describes the local pre-Columbian smelting practice, and the use of the reverberatory furnace for smelting considerably before its widespread adoption."—*D.S.B.*, I, p. 448.

Fine copy.

• Hoover 84.

10. BARBIER, Antoine Alexander. *Dictionnaire des Ouvrages anonymes et pseudonymes composés, traduits ou publiés en Français et en Latin, avec les Noms des Auteurs, Traducteurs et Éditeurs; accompagné de Notes historiques et critiques.* Four vols. 8vo, orig. blue wrappers (a little frayed), orig. printed labels on spines (two frayed away), entirely uncut. Paris: Barrois l'ainé, 1822-27. \$750.00

Second edition, "revue, corrigée et considérablement augmentée." "With the publication of this bibliography of the anonymous and pseudonymous literature in French by Barbier, Napoleon's personal librarian, a new chapter begins in the treatment of anonyma and pseudonyma. His arrangement for the anonymous titles was in the alphabetical order of their first word, except for articles and prepositions."—Grolier Club, *Bibliography*, 117—(1st ed.: 1806-09).

Nice set in original state.

Early Anesthesia & Early Crystallography

11. BARTHOLIN, Thomas. *De Nivis Usu Medico Observationes Variæ. Accessit D. Erasmi Bartholini De Figura Nivis Dissertatio; cum Operum Authoris Catalogo.* One engraved plate depicting the hexagonal nature of various snowflakes. Title printed in red & black. 12 p.l., 232 pp., [4] leaves; 3 p.l., 42 pp.; 8 leaves. 8vo, attractive antique calf-backed speckled boards (minor browning), spine gilt, red morocco lettering piece on spine. Copenhagen: M. Godiccus for P. Haubold, 1661. \$2750.00

First edition. "Chapter XXII of this historically important book makes the first known mention of the use of mixtures of ice and snow for freezing to produce surgical anesthesia. The author states that the technique was taught to him by one Marco Aurelio Severino of Naples. In order not to kill the tissues and cause gangrene, the ice-snow mixture was to be applied on the parts in narrow parallel lines. After a quarter of an hour, feeling would be deadened and the part could be cut without pain. This may be the first mention of such a technique since the time of Avicenna . . .

"The treatise on snow crystals, by Bartholin's younger brother, Erasmus, is the earliest publication on crystallography, and preceded Boyle on gems (1671) by eleven years. This interesting book also contains a list of Thomas Bartholin's works."—*Heirs of Hippocrates* 516.

Fine copy.

♣ Neville, I, p. 82—"A pioneer work in crystallography, preceding by ten years Steno's great *Prodromus*, which is usually considered to have founded the modern science of crystal geometry. Partington discusses this work and its chemical content." Partington, II, pp. 500 & 509.

Privately Printed on Large & Thick Paper

- 12. BENTINCK, Charlotte Sophie (van Aldenburg), Gräfin von.** *Catalogue d'une Collection de Medailles antiques, faite par la Csse Douair. De Bentinck, née Csse d'Aldenburg, Dame de Varel, Kniephausen et Doorwerth.* [Compiled by P. van Damme]. 188 engravings in the text. xi, [1], 726 pp.; 1 p.l., 727-1122 pp.; xlii, [2], 241, 39 pp. Three vols. Large 4to, cont. red morocco, sides nicely decorated in gilt, spine gilt, green morocco lettering pieces on spines, a.e.g. Amsterdam: [Privately Printed] by the Heirs of K. Eel, 1787-87-88. \$7500.00

First edition; a presentation copy of the handsome catalogue of the magnificent collection of ancient Greek and Roman coins and medals formed by Charlotte Sophie, Gräfin von Bentinck (1715-1800), a member of a wealthy Dutch family. She traveled widely — Copenhagen, Berlin, Vienna, throughout Italy and Holland — which enabled her to form her great collection, one of the finest of its kind. This is the only record. The catalogue was issued privately; “cet ouvrage a été imprimé dans une impr. particulier et n'est jamais entré en commerce.”—Graesse, I, 137.

The catalogue, printed on thick and large paper, contains 188 very finely engraved vignettes in the text depicting some of the medals. The rare supplement, published a year later, is present.

A fine and attractive set, with a presentation inscription on the free front endpaper from the Countess, dated Hamburg, 26 July 1787.

• *A.D.B.*, Vol. II, pp. 343-44. Brunet, I, 1647—“Cet ouvrage, rédigé par P. Van Damme, n'a pas été mis dans le commerce.” Lipsius, I, 37.

- 13. BEZOLD, Wilhelm von.** *Die Farbenlehre im Hinblick auf Kunst und Kunstgewerbe.* Nine colored plates & 63 illus. in the text. xviii, 296 pp. 8vo, cont. cloth, spine gilt. Braunschweig: G. Westermann, 1874. \$1250.00

First edition. “Bezold represents the generation beyond Maxwell and Helmholtz, when the distinction between color-light and color-pigment was at last clearly understood in the scientific world. The great value of dyed cotton textiles, which had accelerated the practical applications of the new aniline and other artificial colors, sponsored a growing awareness of color's importance in the 19th century. Bezold is typical of the best scientist-vulgarizers who incorporated the pragmatic findings of Chevreul with the most recent science, in a conscious effort to reach out towards art and industry. His work, typical of his generation, incorporates sections on the decorative and ornamental arts and on esthetic principles in painting, frankly non-scientific concerns which reflect the scientist's expanded perception of their role in society.”—Birren Collection,

p. 7.

Two of the plates are color scales.

Fine copy. Old Slavic library stamp on title.

14. BOSSUT, Charles. *Traité Élémentaire d'Hydrodynamique: Ouvrage dans lequel la Théorie et l'Expérience s'éclaircissent ou se suppléent mutuellement; avec des Notes sur plusieurs endroits qui ont paru mériter d'être approfondis.* 209 figures on 16 folding engraved plates. Titles in red & black. 2 p.l., xxxvii, [1], 394 pp.; 2 p.l., 444 pp. Two vols. 8vo, cont. cat's paw sheep (several skillful repairs to bindings), spines gilt, contrasting morocco lettering pieces on spines. Paris: C.A. Jombert, 1771. \$1950.00

First edition. "Although its title was hydrodynamics, its subject matter was essentially hydraulics...The first volume was original only in arrangement and treatment, but it still provides an excellent picture of the state of knowledge (as he saw it) at Bossut's time. The experimental data presented in the second volume were largely new, and noteworthy even today are his comments on the difficulty of large-scale experiments versus the falsity of those at too small a scale."—Rouse & Ince, *History of Hydraulics*, p. 127.

Bossut (1730-1814), assumed the chair of hydrodynamics established by Turgot at the Louvre. He was a major contributor to European scientific education and his texts represent the emergence of a standardized, rigorous system of engineering physics textbooks.

Very good set. Ex Bibliotheca Mechanica.

☛ *D.S.B.*, II, pp. 334-35. Roberts & Trent, *Bibliotheca Mechanica*, p. 46.

An Important Work on Mineralogy & Metals

15. CESALPINO, Andrea. *De Metallicis Libri Tres.* Engraved arms of Clement VIII on title. 8 p.l., 222 pp., 1 leaf. 4to, cont. limp vellum. Rome: A. Zannetti, 1596. \$19,500.00

First edition, and rare, of one of the major works by Cesalpino (1519-1603), the distinguished Renaissance physician and scientist. This is one of the most important works on mineralogy of the period, containing also original views on geology and chemistry.

According to Geikie, the book may still be usefully consulted for information on the stones and ores of Italy. Cesalpino was one of the first who gave the true explanation of the origin of fossils. He also shows remarkable insight into the nature of crystallization, a phenomenon which he was one of the first to explain

and describe correctly. A whole chapter is devoted to the magnet (Chap. 55).

Interesting for the history of chemistry is Cesalpino's theory of the increase in weight on calcination of lead (p. 184) which foreshadows the famous experiments on oxidation made in the 18th century.

For a detailed account of the book's contents, see Partington, II, pp. 89-92 and III, pp. 617-18.

Very good copy.

• D.S.B., III, pp. 80-81. Geikie, p. 53. Hoover 212. Neville, I, p. 255—"Rare." Schuh, *Mineralogy & Crystallography: A Bibliography, 1469 to 1920*, 1108—"Cesalpino divides his work into 3 major sections. Book I deals with the genesis of minerals and sketches a theory of classification according to their admixtures of the four elements. Book II treats limestone, marble, precious stones, crystals and salts, and the processes by which crystallization gives minerals their regular form, while Book III is devoted to metals and mining. Throughout the author provides commentary from ancient and contemporary sources, together with his own insightful observations. *De Metallicis* is an important book for giving an early recognition to the true organic nature of fossils, the phenomenon of crystallization, speculating on the existence of oxygen and observing that gases have weight."

Cheseaux's Comet & His Paradox

16. CHESEAUX, Jean Philippe Loys de. *Traité de la Comete qui a paru en Decembre 1743, & en Janvier, Fevrier & Mars 1744 . Contenant outre les Observations de l'Auteur, celles qui ont été faites à Paris par Mr. Cassini & à Geneve par Mr. Calandrini. On y a joint diverses Observations & Dissertations astronomiques...* Six folding engraved plates. Title in red & black. 1 p.l., 308 pp. 8vo, antique mottled calf (light browning), single gilt fillet round sides, spine richly gilt, red morocco lettering piece on spine. Lausanne & Geneva: M.M. Bousquet, 1744. \$6500.00

First edition of this important book in which Cheseaux (1718-51), grandson of Crouzas and a fellow the Royal Society of London, first stated what was to become known as "the paradox of Cheseaux": "with an infinite and uniform distribution of stars throughout space, the night sky should shine with a brightness corresponding to their average surface brightness." A number of notable astronomers struggled with this problem, including Halley, Olbers, Struve, and Herschel.

"The magnificent comet of 1744 was both bright and unusual in that it was reliably reported that it had multiple tails spread out like a fan. The Swiss astronomer Jean Philippe Loys de Cheseaux, after whom the comet is often named, began his observations on December 13, 1743, and computed a parabolic orbit based on his own observations through March 1, 1744...Before morning

twilight on March 7 and 8, 1744, Cheseaux reported seeing a multiple-tail system, with 6 distinct rays extending above the horizon."—Yeoman, *Comets*, pp. 161-62.

This work also contains the observations of César François Cassini and Jean Louis Calandrini.

Very good copy. Perhaps lacking the approbation leaf at end.

☛ Lalande, p. 425.

Fundamental Work on Color

17. CHEVREUL, Michel Eugène. *De la Loi du Contraste simultané des Couleurs, et de l'Assortiment des Objets colorés, considéré d'après cette Loi dans ses Rapports avec la Peinture, les Tapisseries des Gobelins, les Tapisseries de Beauvais pour Meubles, les Tapis, la Mosaïque, les Vitraux colorés, l'Impression des Étoffes, l'Imprimerie, l'Enluminure, la Décoration des Édifices, l'Habillement et l'Horticulture.* Two vols. Text vol.: two folding printed tables. xv, 735 pp., one leaf of errata. 8vo, attractive antique calf-backed marbled boards (several signatures foxed), flat spine gilt. [with]: Atlas vol.: 40 plates, most of them colored and folded, many of them signed by the author, and nine printed sheets, each of a different color. 2 printed leaves of text (including title). Large 4to, binding as above. Paris: Pitois-Levrault, 1839.
\$22,500.00

First edition of this classic work by the great French chemist Chevreul (1786-1889), and one of the most influential treatises on color during the 19th century.

"Chevreul made an intensive study of the principles governing the contrast of colors, which resulted in his monumental *De la loi du contraste simultané des couleurs* (1839), the most influential of his many books. This book was the outcome of his discovery that the apparent intensity and vigor of colors depended less on the pigmentation of the material used than on the hue of the neighboring fabric. After many experiments on color contrast Chevreul formulated for the first time the general principles and effects of simultaneous contrast, the modification in hue and tone that occurs when juxtaposed colors are seen simultaneously...Chevreul designed his *De la loi du contraste simultané* less for scientists than for painters, designers, and decorators. He devoted much of the book to the applications of the principles of contrast to the various problems that the artist and designer encounter in the use of color and to the harmonizing of colors and their use as agents of pictorial harmony...The neo-impressionist painters derived their methods of painting from Chevreul's principles, applying separate touches of pure colors to the canvas and allowing the eye of the observer to combine them."—*D.S.B.*, III, p. 241.

Nice set.

☛ *En Français dans le Texte* 237. Kemp, *The Science of Art*, pp. 306-07.

18. (CYPRIAN, Ernst Salomon). *Bibliotheca Cypriana, sive Catalogus Librorum Historico-Theologicorum, quos Ern. Sal. Cyprianus...Gothanus...conquisivit. Editio Auctior...Accedunt Indices I. Theologicus. II. Historicus. III. Antiquarius & Miscellaneus. IV. Autorum notabiliorum.* 15 p.l., 984 pp., [30] leaves of index. Thick 8vo, cont. half-vellum & paste-paper boards. Leipzig: G.M. Knoch, 1733. \$1950.00

The catalogue of the vast library of Cyprian (1673-1745), "one of the last important and influential representatives of the Lutheran orthodoxy."—*N.D.B.* He was librarian of the Ducal Library at Gotha, did much to improve it, and published a catalogue of its MSS. His library was certainly one of the most important "Gelehrtenbibliotheken" of his time; a considerable portion of it was, of course, devoted to theology — the title-page especially recommends it to the student of theology and ecclesiastical history — and the subject index of theological works alone occupies 29 pp., as opposed to that of all other subjects which only takes up 20 pp.

This is the second edition of the catalogue, much enlarged with items acquired since the publication of the first edition (Gotha: 1726). The 1747 Gotha edition is no doubt the sale catalogue, published after Cyprian's death.

At the end, on nine pages, we find the bibliography of Cyprian's forty-nine publications.

Nice copy.

• *A.D.B.*, Vol. 4, pp. 667-69. Loh, G., *Verzeichniss der Kataloge von Buchauktionen und Privatbibliotheken aus dem deutschsprachigen Raum*, Vol. II, p. 17. Taylor, *Book Catalogues*, p. 238.

From the Library of Franziska von Hohenheim

19. DEZALLIER D'ARGENVILLE, Antoine Joseph. *Conchyliologie oder Abhandlung von den Schnecken, Muscheln und andern Schaalthieren welche in der See, in süßsen Wassern und auf dem Lande gefunden werden, Nebst der Zoomorphose oder Abbildung und Beschreibung der Thiere welche die Gehäuse bewohnen.* Aus dem Französischen übersetzt und mit Anmerkungen vermehret. Finely engraved added title & 40 engraved plates. Printed title in red & black. 2 p.l. (incl. engraved title), xii, 302, 82, lviii, [14] pp. Folio, cont. marbled boards (one corner a bit worn), spine gilt, red & green leather lettering pieces on spine. Vienna: Krauss, 1772.

\$15,000.00

First edition in German, and a very fine copy from the library of Franziska von Hohenheim (see below). Dezallier (1680-1765), one of the chief contributors to the *Encyclopédie* (his articles were chiefly on gardening and ornamental

waterworks in gardens) formed “one of the finest private collections of such objects as stones, shells, paintings, sketches, and art prints. No mere hoarder of curios, but a collector-scholar, he allowed visitors into his private museum and helped stimulate the passion for natural history so prevalent in eighteenth-century France.”—Kafker, *The Encyclopedists as Individuals: A Biographical Dictionary of the Authors of the Encyclopédie*, pp. 12-16.

The present work is translated with valuable additions from the second French edition of 1757. It is a storehouse of information on shells and remains today a valuable source because it describes many of the famous eighteenth-century natural history collections of Europe. Written for the collector in order to facilitate the identification of shells for the cabinet, it “was very popular with collectors and even Linnaeus utilized it to arrange his shells.”—Dance, *Shell Collecting. An Illustrated History*, pp. 58-59. There is an extensive list of shells, with remarks on rarity and desirability, followed by a discussion of private natural history collections in Paris and Holland, with remarks on the outstanding features of each collection.

The plates are especially well-engraved and are present in rich, dark impressions.

Very fine and fresh copy with large margins. Old library stamp on title. From the library of Franziska Theresia Reichsgräfin von Hohenheim, the second wife of Duke Carl Eugen of Württemberg. Her characteristic bindings are always so pleasing and the books so fresh.

• D.S.B., I, pp. 243-44. Yves Laissus, “Les Cabinets d’Histoire Naturelle,” in *Enseignement et Diffusion des Sciences en France au Dix-Huitième Siècle* (ed. René Taton), p. 679-85.

Bound in Richly Gilt Contemporary Vellum

20. DIBDIN, Thomas Frognall. *The Bibliographical Decameron; or, Ten Days Pleasant Discourse upon Illuminated Manuscripts and Subjects connected with Early Engraving, Typography, and Bibliography.* 37 plates (see below) & numerous engravings pasted in the text. Three vols. Large 8vo, cont. vellum over boards (short crack at head of upper joint of Vol. I, some offsetting from plates), sides elaborately panelled in gilt, crown & globe gilt stamps in the corners, central diamond shaped pointillé cartouche, spines elaborately gilt, a.e.g. London: Printed for the Author, 1817.

\$4750.00

First edition, and an extremely attractive set, of “perhaps the most lavish of all Dibdin’s works . . . Its publication was a financial success and doubtless marks the high-water mark of the Dibdinian bibliomania.”—Jackson 40.

As is almost always the case, plate 9 in the first volume is lacking (see Windle

& Pippin A28). The Thomas Payne plate in Vol. III is in the third state.

Signature of Sarah Tyrconnel on each title and with the bookplate of her husband, John Delaval Carpenter (1790-1853), Earl of Tyrconnel. Bookplate of Lord Wardington.

*Large Paper Set, Handsomely Bound
The Last & Best Edition*

21. DIBDIN, Thomas Frognall. *An Introduction to the Knowledge of Rare and Valuable Editions of the Greek and Latin Classics. Together with an Account of Polyglot Bibles, Polyglot Psalters, Hebrew Bibles, Greek Bibles and Greek Testaments; the Greek Fathers, and the Latin Fathers.* One engraved plate. Two vols. Large 8vo, cont. straight-grained morocco, double gilt filet round sides, acorn device in gilt in each corner, spines richly gilt, a.e.g. London: Printed for Harding & Lepard, 1827. \$4000.00

“Fourth edition, greatly enlarged and corrected”; this one of 250 sets on large paper and is very handsomely bound. “This edition is entirely rewritten, and contains for the first time an Account of the best editions of the Hebrew Bibles and of the Greek and Latin Fathers, but omits the Lexicography, Grammars and Collections, and Lists of Classics issued by various printers, given in the second and third editions.”—Jackson 6.

A very fine and attractive set. Bookplates of John William Pease and Lord Wardington.

“Le Plus Grand Ouvrage d’Astronomie Analytique”

22. DIONIS DU SÉJOUR, Achille Pierre. *Traité Analytique des Mouvements apparens des Corps célestes.* Seven folding engraved plates. 2 p.l., xxx, 738 pp., 1 leaf of errata; 2 p.l., 680, lvi pp. Two vols. Large 4to, cont. sheep (a little rubbed, head of spine of Vol. I a bit chipped), spines gilt, red & green morocco lettering pieces on spines. Paris: la Veuve Valade, 1786-89. \$5750.00

First edition. “From 1764 to 1783 he [Dionis] wrote a series of important memoirs on the application of the most recent analytic methods to the study of the principal astronomical phenomena (eclipses, occultations, reductions of observations, determination of planetary orbits, etc.). Revised and coordinated, these memoirs were reprinted in the two-volume *Traité analytique des mouvements apparens* [sic] *des corps célestes* (1786-1789), of which Delambre gives a detailed analysis... All these works are dominated by an obvious concern for rigor and by a great familiarity with analytical methods... their reexamination in the light of

present possibilities of calculation would certainly be fruitful."—*D.S.B.*, IV, p. 107.

Very good set.

• Lalande, p. 599—"Le plus grand ouvrage d'astronomie analytique."

Indispensable Aids

23. [DRAUD, Georg]. *Bibliotheca Librorum Germanicorum Classica. Das its: Verzeichnuss aller und jeder Bücher, so fast bey dencklichen Jaren in Teutscher Sprach...ausgangen...* 4 p.l., 563 pp., 16 leaves (the last a blank). 4to, cont. rough vellum (reusing an old MS.) over boards (occasional browning), remains of green silk ties. Frankfurt: P. Kopf, 1611.

[bound with]:

— . *Bibliotheca Exotica, sive Catalogus Officinalis Librorum peregrinis linguis usualibus scriptorum...* 1 p.l., 219 pp. 4to (some browning throughout). Frankfurt: P. Kopf, 1610. \$9500.00

First editions of the largest classified book lists of the early 17th century. Draud's *Bibliothecae* are important classified compilations of the semi-annual German Book Fair catalogues. They were indispensable aids to scholars and booksellers for more than a century. Draud followed in the footsteps of Bassé and Clessius and his three *Bibliothecae* have been described by Georg Schneider as "le sommet et le point final de la bibliographie allemande avant la Guerre de Trente ans."

The first work treats books in German and the second work describes books in the modern European languages, foremost among them those in French. Classed by subject, such as chemistry and medicine, music, poetry, theology, etc., the two *Bibliothecae* list many thousands of titles. "For historical purposes and especially those in which one wants to follow every clue to its end, one dare not pass by the *Bibliothecae*."—Taylor, *General Subject Indexes since 1548*, p. 104—(& see pp. 98-112). Taylor states on page 110 that the *Bibliothecae* "have become rarities of the first order."

Very good copies. A *Bibliotheca Classica*, published in 1611 and describing books in the learned languages, is not present (for some reason, this is often the case). Ownership inscription on front paste-down of Joannis Fischer, 1656. From the library of His Serene Highness Prince Fürstenberg at Donaueschingen.

• Grolier Club, *Bibliography*, 47. Malclès, *La Bibliographie*, p. 45. Pollard & Ehrman, p. 82. Taylor, *Book Catalogues*, pp. 88 & 110.

“An Invaluable Source of Information”

24. ENGRAMELLE, Marie Dominique Joseph. *La Tonotechnie ou l'Art de noter les Cylindres, et tout ce qui est susceptible de Notage dans les Instrumens de Concerts mécaniques. Ouvrage nouveau.* Engraved frontis., five folding engraved plates (one with careful repairs to folds on verso), & a few illus. in the text. Engraved head-piece on first leaf of dedication. Pages 43-50 are larger folding leaves entitled “Table de Caractères” with woodcuts. 5 p.l. (incl. frontis.), xxvii, [1], 236, [4] pp. 8vo, modern red morocco, uncut. Paris: P.M. Delaguette, 1775. \$5000.00

First edition of a scarce book which describes a numbered dial (*cadran*) used in “notating” the studded barrels of mechanical musical instruments. The invention was immediately applied to music boxes; later applications included the pneumatic organ and player piano.

Engramelle (1727-1805), was a French builder of mechanical instruments. “The description (in his *La tonotechnie*, 1775) of his invention of a numbered dial (*cadran*) and its use in ‘notating’ the studded barrels of mechanical musical instruments were important in his own time and constitute an invaluable source of information today on French late Baroque performing practices. The plans for the studded barrels to play various pieces of music were accompanied by tables, from which the following generalizations can be drawn: all tempos are strikingly fluid; endings are clearly retarded; the inequality of *notes inégales* ranges in proportion from 3 : 1 to 9 : 7; staccato takes precedence over legato; there are minute gradations of staccato, which is however usually extremely short, and there are similarly fine shades of differentiation for legato; grace notes are short and invariably fall on the beat; no trills maintain the same rapidity throughout; and finally, all such ‘rules’ are allowed broad freedom in their application.”—*New Grove Dictionary*, Vol. 6, pp. 202-03.

Very good copy. Contemporary ownership inscription on half-title and title.
 ♣ Chapuis, *Histoire de la Boîte à Musique et de la Musique mécanique*, pp. 27-32.

*“One of the Best of the 16th Century Treatises
on the Mediaeval Proportion”*

25. FERNEL, Jean. *De Proportionibus Libri Duo. Prior, qui de simplicibus proportionibus est, & magnitudinum & numerorum tum simplicium tum factorum rationes edocet: Posterior, ipsas proportionibus comparat: earumque rationes colligit.* Title within Colines’s fine woodcut “Quadrivium” border & criblé initials. 4 p.l., 24 leaves. Folio, attractive antique panelled calf (title a little soiled). Paris: S. de Colines, 1528. \$22,500.00

First edition of this very rare book; it “is one of the best of the sixteenth-century treatises on the mediaeval proportion. It follows the Boethian treatment,

as seen also in the work of Bradwardin."—Smith, *Rara Arithmetica*, p. 157.

"Fernel (1497-1558), before making a name for himself in medicine, was first attracted by the mathematical sciences, as evidenced by his first three publications — of which this is the third, and all three of which were issued by Simon de Colines: *De Proportionibus* was preceded by *Monalosphaerium*, 1527, and *Cosmotheoria*, 1528. Fernel received his M.D. degree in 1530 and became a very influential physician through his numerous writings; he became physician to Catherine de Médicis, whose barrenness he cured, and eventually was appointed chief physician to King Henri II."—Schreiber 35.

Fine unpressed copy.

• Renouard 117. Sherrington, *Fernel*, p. 189 (3.C).

The Atomic Theory

26. GASSENDI, Pierre. *De Vita et Moribus Epicuri Libri Octo*. Woodcut printer's device on title & one engraved plate with a port. of Epicurus. 4 leaves, 5-236, [18] pp. 4to, cont. French sheep (head & foot of spine neatly repaired, several signatures lightly browned), single gilt fillet round sides, spine richly gilt, red morocco lettering piece on spine. Lyons: G. Barbier, 1647. \$8500.00

First edition of an important book; this life of Epicurus, which emphasized his philosophy of physics, was the foundation of Gassendi's Epicurean atomism. His atomic theory was applied to chemistry by Boyle and adopted by Newton in his new mechanical philosophy.

"Before Galileo and Descartes had succeeded in combining mathematics with mechanics, the chief refuge of hard-headed opponents of scholastic verbalism and Renaissance Platonism was the tradition of Greek atomism... Its chief representative during the period of Cartesian domination was Gassendi, who stands both as the climax of Epicurean atomism of the Renaissance in its accommodation to a mathematical science of nature, and as the first of the explorers of the implications of that science for the traditional empirical philosophy of knowledge. Gassendi is thus with Hobbes one of the fathers of 'scientific' empiricism... Gassendi indeed fancied himself the creator of the great rival scientific system to that of Descartes, the system founded on sound experience. History has reserved that distinction for Hobbes; yet it probable that Gassendi contributed far more to the actual advance of scientific ideas than his more consistent and gifted British fellow-worker."—J.H. Randall, *The Career of Philosophy*, Vol. I, pp. 521-23.

Fine unpressed copy. Bookplate of René Escande de Messières.

• Partington, II, pp. 458-66.

Early German Forestry

In Prof. Jared Diamond's fascinating book *Collapse. How Societies Choose to Fail or Succeed* (2005), one of the author's main themes is the devastating environmental and social consequences of deforestation. Prof. Diamond does point to two countries which, in the 18th century, were able to arrest and reverse deforestation: Germany and Japan. By scientifically managing their forests in a top-down manner, each country created an elaborate system of woodland replacement, treating their forests as plantations.

In Germany, a bureaucracy developed, professionally trained in the administration of the state and its domains (*Kameral- or Staatswissenschaften*). Forests made up one of the largest sectors of the state economy in central Europe and forest management was one aspect of state administration which became subject to quantification and rationalization. This allowed the landowners — mostly princes and landed nobility — to maintain and increase their wealth.

"Beginning around 1765, dozens of books and articles published in Germany had established principles and practices of sound forest management; few kindred publications appeared in languages other than German for nearly a century. Theories, practices, and instructional models from Germany provided the starting point for every other national effort in forestry science and management until the end of the nineteenth century...

"Wood in one form or another was essential for home heating and construction, iron manufacture, glassmaking, shipbuilding, and other crafts and trades, while secondary products of the forest found applications in myriad occupations, such as tanning and agriculture. Before the age of coal, which would not begin in many parts of Germany until the middle of the nineteenth century, wood was king."—Lowood, "The Calculating Forester: Quantification, Cameral Science, and the Emergence of Scientific Forestry Management in Germany" in *The Quantifying Spirit in the 18th Century*, (ed. by Tore Frängsmyr, J.L. Heilbron, & R.E. Rider), pp. 317-18 (& see the rest of this article for a really detailed and excellent history of the subject).

In the 19th century, reformers of forestry in France, England, and the United States were all profoundly influenced by the German *Forstwissenschaft*.

The books described below include many of the most important German works of the late 18th and early 19th century on scientific forest management. Most of them come from one recently dispersed noble library, that of the Counts of Seinsheim. Apart from a few later family acquisitions, the books were acquired by Joseph Franz Maria Ignaz von Seinsheim (1707-87) and his son Maximilian Clemens Joseph Maria von Seinsheim (1751-1803). Both were high government officials (or *Kameralists*). Their books are in particularly fresh and handsome condition.

- 27. BROCKE, Heinrich Christian von.** *Abhandlung und Beantwortung der Frage: wie ohne Nachtheil der Festigkeit des Holzes das Wachstum der Forsten beschleuniget werden könne?* 2 p.l., 34 pp. Large 4to, cont. half-sheep & speckled boards (one corner rather worn, light marginal dampstaining). Berlin: im Verlage der Buchhandlung der Realschule, 1774. \$950.00

First edition and rare with no copy in *N.U.C.*, OCLC, or RILIN. Brocke (1713-78), a prominent expert on all matters pertaining to forests, wrote several controversial books regarding forest management; they were well-known for their candor and sharp opinions. The present prize essay is concerned with accelerating the maturation of forests without compromising the quality of the wood.

Very good copy. Ownership inscription on title dated 1791.

☛ *A.D.B.*, Vol. 3, pp. 336-37. Mantel, I, 365.

- 28. BURGSDORF, Friedrich August Ludwig von.** *Forsthandbuch. Allgemeiner theoretisch- praktischer Lehrbegriff sämtlicher Försterwissenschaften; auf Seiner Königlichen Majestät von Preussen allerhöchsten Befehl abgefasst.* One folding handcolored engraved plate & 9 folding printed tables (3 of which are included in the pagination). lvi, 786 pp. 8vo, cont. half-sheep & paste-paper boards (light foxing), spine gilt, contrasting vellum lettering piece on spine. Frankfurt & Leipzig: 1792. \$1350.00

The unauthorized reprint of the second edition of this classic work. The first edition appeared in 1788 and the second authorized edition was published by the author in 1790 in Berlin. Due to the enormous success of this book, it was pirated and published again in Frankfurt and Leipzig, without any publisher

named, in 1792. There were later editions, authorized and pirated, through a fifth edition in 1812 and a French translation.

This is, according to *A.D.B.*, Burgsdorf's most important book. "Burgsdorf's Bedeutung ist doppelter Art. Er war Naturforscher, bez. Forstbotaniker und Forstwirth zugleich und wirkte in beiden Richtungen durch Wort, That and Schrift."—*A.D.B.*, Vol. 3, pp. 613-14.

Burgsdorf (1747-1802), was manager of the forests of the Kurmark Brandenburg and a member of the Berlin Académie des Sciences and many other societies. The author wrote a number of "highly esteemed" (*N.B.G.* in trans.) books on arboriculture and forestry.

The handcolored plate is a map of an idealized forest, depicting by use of different colors, the various sections and types of trees.

Fine copy and very rare with no copy in the U.S., according to OCLC. Finely engraved contemporary bookplate of "Le Comte de Seinsheim."

♣ Mantel, I, p. 15. *N.B.G.*, Vol. 7, col. 836.

29. 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. München: J. Lindauer, 1799.

[bound with]:

[ZANTHIER, Hans Dietrich von]. *Das wohlgeübte und erfahrene 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 München. 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 Ilseburg 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.

*The Most Important German Periodical on Forest
Management of the 18th Century*

30. FORST-ARCHIV zur Erweiterung der Forst- und Jagd-Wissenschaft und der der Forst- und Jagd-Literatur [from Vol. XVIII]: *Neues Forst-Archiv...*
Edited by Wilhelm Gottfried von Moser [from Vol. I] & Christoph Wilhelm Jakob Gatterer [from Vol. XVIII]. Many titles with engraved vignettes & 23 folding engraved plates (four finely hand-colored). Many folding printed tables (some included in the pagination). 30 vols. [all published]. 8vo, uniformly bound cont. half-sheep & paste-paper boards (occasional minor foxing), spines gilt, contrasting vellum lettering pieces on spines. Ulm: Stettin, 1788-1807. \$5000.00

A complete run of the second and most important German periodical on forest management of the 18th century. "Unschätzbares Quellenwerk, wertvoll vor allem wegen des Abdrucks zahlreicher Jagdordnungen."—Lindner 11.1457.01. A particularly important feature of this journal appears in Vols. XVIII and XIX: the first bibliography of all aspects of forestry and forest management. This bibliography by Gatterer is well-annotated and far-reaching. The contributors to the journal are a roll-call of all the leading writers on forestry within the German-speaking world.

Moser (1729-93), studied law and cameral sciences at the universities of Halle and Tübingen. He specialized in forest management and served the kingdom of Württemberg and the prince of Thurn und Taxis. His *Grundsätze der Forstökonomie* (1757) was one of the earliest German classics on forestry.

Son of the great German historian, Johann Christoph Gatterer, Christoph Wilhelm Jakob (1759-1838), studied mineralogy and natural sciences at Göttingen, receiving his advanced degree in 1778. He then accepted a position as professor of "Kameral" science and technology at the University of Heidelberg in 1787. He was an important bibliographer of mining and mineralogy as well as forestry.

A fine and handsome set of this rare periodical, uniformly bound. From the library of Graf von Seinsheim with his bookplate in many volumes.

• *A.D.B.*, Vol. 8, pp. 409-10 (Gatterer) and Vol. 22, pp. 384-85 (Moser). Kronick, *Scientific and Technical Periodicals of the Seventeenth and Eighteenth Centuries*, 595.

One of the Classic Early Works on Forest Management

31. GLEDITSCH, Johann Gottlieb. *Systematische Einleitung in die neuere aus ihren eigenthümlichen physikalisch- ökonomischen Gründen hergeleitete Forstwissenschaft.* Finely engraved port. of the author serving as frontis. xxviii, [2], 544 pp.; xxxii, 677, [73] pp. Two vols. 8vo, cont. half-sheep & paste-paper boards (foxing as usual due to the quality of the paper), contrasting vellum lettering pieces on spines. Berlin: A. Wever, 1775. \$1650.00

First edition of one of the classic early works on forest management. Gleditsch (1714-86), a celebrated German botanist and sylviculturist and a close friend and supporter of Linnaeus, was director of the botanical garden at Berlin. He wrote many works on botany and sylviculture and gave the first public courses on scientific forest management in Germany.

Fine and handsome set. From the library of Graf von Seinsheim.

♣ Lowood, "The Calculating Forester: Quantification, Cameral Science, and the Emergence of Scientific Forestry Management in Germany" in *The Quantifying Spirit in the 18th Century* (ed. by Tore Frängsmyr, J.L. Heilbron, & R.E. Rider), p. 331. Mantel, I, 13. Pritzel 3361.

32. GUIOT, —. *Herrn Guiot Oberaufsehers der Wälder zu Rambouillet kurzgefasstes Forst-Handbuch, in welchem die Beschreibung, Eigenschaften, Nutzen und besondere Erziehung der verschiedenen Holz-Arten...enthalten...grösten theils aus des Herrn dü Hamel du Monceau allgemeinen Abhandlung von den Wäldern, herausgezogen.* 20 p.l., 480, [16] pp. 8vo, cont. half-sheep & paste-paper boards, spine gilt, contrasting vellum lettering piece on spine. Nuremberg: W. Schwarzkopf, 1771. \$1350.00

First edition and very rare; OCLC locates no copy in the U.S. Guiot was the manager of the vast royal forest at Rambouillet near Paris. Much of this book is based on the writings of Duhamel du Monceau, whose books on trees, their cultivation, the strength and preservation of wood, and its uses in ship-building, were standard texts of the 18th century.

Fine and fresh copy with the bookplate of the Graf von Seinsheim.

♣ Mantel, I, 11.

33. HANDBUCH für praktische Forst- und Jagdkunde, in alphabetischer Ordnung ausgearbeitet von einer Gesellschaft Forstmänner und Jäger. Engraved vignettes on each title & one folding printed table of music & verse. 1 p.l., xv, [1], 826 pp.; 2 p.l., 898 pp.; iv, 755 pp. Three vols. 8vo, cont. mottled half-sheep & paste-paper boards (occasional light foxing), spines gilt, contrasting leather lettering pieces on spines. Leipzig: Schwickert, 1796-96-97. \$1500.00

First edition and very rare. "Seltenes, anonym erschienenes und wegen seiner äusserst detaillierten jagdlichen Begriffsinhalte jadgehichtlich bedeutendes Lexikon."—von Knorring 494.

This work contains an extremely comprehensive index at the end of nearly 200 pages.

Fine set from the library of Graf von Seinsheim with his bookplate in each volume.

☛ Mantel, I, 19.

34. HARTIG, Georg Ludwig & Theodor. Forstliches und forstnaturwissenschaftliches Conversations-Lexikon. Ein Handbuch für Jeden, der sich für das Forstwesen und die dazu gehörigen Naturwissenschaften interessirt. Finely lithographed frontis. port. of G.L. Hartig. xiv, 1034, [2] pp., [2] pp. of ads. Thick 8vo, cont. marbled boards, black leather lettering piece on spine. Berlin: Nauck, 1834. \$950.00

First edition of this rare and extensive guide to forest management by G.L. Hartig (1764-1837), "Ober-Landforstmeister" of Prussia and professor of forestry at the University of Berlin, and his son Theodor (b. 1805), professor of forestry at the Forstakademie at Berlin. Both Hartigs were leaders in developing forestry as a science in Germany and the authors of many important books.

Fine copy of a very useful book which enjoyed a second edition in 1836.

☛ A.D.B., Vol. 10, pp. 659-65.

35. HEYNE, F.A. Die sehr leichte Kunst unsre Wohnungen feuerfest zu machen und unsre Waldungen von Untergang zu retten. Two engraved plates (one hand-colored). viii, 240 pp. 8vo, cont. half-vellum & paste-paper boards. Freiberg: Craz & Gerlach, 1803. \$1250.00

First edition and very rare with no copy in OCLC. In the present work, Heyne describes methods of constructing fire proof dwellings, thereby using less timber

and preserving the forests of Germany.

Fine copy. Old stamp on verso of title.

36. HUBER, Candidus (or Kandid). *Vollständige Naturgeschichte aller in Deutschland einheimischen und einiger nationalisirten Bau- und Baumhölzer, in besonderer Hinsicht auf alle Feinde und Hindernisse ihres Wachsthumes durchgehends nach den bewährtesten Grundsätzen der neuern Kultur und Technologie nebst einem Nachtrage über das Kohlenwesen und mehrere auf den Blättern der bäume vorkommenden gewächse.* ix, [1], 148 pp.; 1 p.l., [149]-399, [1] pp. Two vols. in one (with continuous pagination). Large 4to, cont. yellow-grey boards, blue leather label on spine. München: 1808.

\$1250.00

First edition and very rare; according to OCLC, there is no copy in America. Huber (1747-1813), a Benedictine monk at the Bavarian monastery Ebersberg, is most famous for making one of the first “xylotheke” or “library of wood samples,” consisting of fruits, seeds and twigs with samples of the wood. His “xylotheke” consisted of 24 volumes of samples.

The present work classifies all the trees found in Germany into various groups and describes each tree’s characteristics in a series of tables. Huber provides details on the names of the trees in local dialects as well as their Linnaean, French, and English names; economic uses; their fruits and seeds; height and thickness; descriptions of the bark and hardness of the wood; etc. I believe this is the largest and most complete survey of German trees of the period.

Fine and handsome copy from the library of Graf von Seinsheim.

☛ Mantel, I, 228. Pritzel 4298.

37. KOENIG, G. *Anleitung zur Holztaxation, ein Handbuch für jeden Forstmann und Holzhändler.* One folding engraved plate & numerous tables in the text. 8 p.l., 260, [6], 152, [7] pp. 8vo, cont. green sheep-backed green boards, flat spine gilt, orange leather lettering piece on spine. Gotha: Becker, 1813.

\$750.00

First edition and very rare with no copy in OCLC. König describes here the methods of valuing forests for purposes of taxation. The present book is the second part of the series *Die Forstorganisations-Lehre* — each part was published separately — and was one of the most complete books on the subject of its time.

Fine and pretty copy.

☛ Mantel, I, 523.

- 38. KREITSCHECK, Joseph.** *Praktischer Unterricht zur kubischen Berechnung und Schätzung aller Bauholzgattungen. Mit 55 angehängten Bauholztabelle zum Vortheile und Nutzen aller Forstmänner und Werkleute.* 78, [2] pp., [29] leaves of tables. 8vo, cont. half-sheep & paste-paper boards (minor binding wear), spine gilt, contrasting leather lettering piece on spine. Vienna: A.A. Patzowsky, 1794. \$1250.00

First edition and very rare; OCLC does not locate a copy in the U.S. Kreitscheck was a member of the Royal Forestry Service of Lower Austria. As methods of valuing forests improved during the second half of the 18th century, the ability to tax the owners of forests also improved. The present work is a comprehensive guide to the methods of calculating the value of forests.

From the Apelschen Bibliothek at Ermlitz. Old library stamp on verso of title.
 ♣ Mantel, I, 480.

His First Book

- 39. LAUROP, Christian Peter.** *Ueber Forstwirthschaft besonders über Erhaltung, Abtrieb und Wiederaanbau der Wälder.* Finely engraved vignette on title & one finely hand-colored engraved map. xxiv, 470 pp., [2] pp. of ads. 8vo, cont. half-sheep & paste-paper boards, spine gilt, contrasting vellum lettering piece on spine. Leipzig: S.L. Crusius, 1796. \$1750.00

First edition of the author's first book and very scarce. Laurop (1772-1858), "Forstmann, zumal ausgezeichnete Kenner der forstwissenschaftlichen Literatur" (A.D.B.), was professor of forestry and one of the leading writers in Germany on the subject. His books were known for their clarity and thorough understanding of the subject.

The present book is concerned with the maintenance, ecology, harvesting, and restocking of forests.

Fine and handsome copy with the engraved bookplate of the Graf von Seinsheim.

♣ A.D.B., Vol. 18, pp. 68-71. Mantel, I, 19.

- 40. NAU, Bernhard Sebastian von.** *Anleitung zur deutschen Forstwissenschaft.* 8 p.l., 428 pp. 8vo, cont. mottled half-sheep & paste-paper boards. Mainz: Universitätsbuchhandlung, 1790. \$1350.00

First edition. Nau (1766-1845), was professor of natural history at the University of Mainz and, later, professor of the same subject at the Forestry School at Aschaffenburg. He was also conservator of the mineralogical collection

at Munich.

This is a summary of all the developments which had taken place in the science of forest management during the previous fifty years in Germany. Nau clearly had a complete command of the literature as nearly every section contains bibliographical references.

Fine copy from the library of Graf von Seinsheim.

• Humpert 3125. Mantel, I, 17. Poggendorff, II, 255-56.

41. PARROT, Christoph Friederich. *Gemeinnütziges praktisches Handbuch der Land- und Stadtwirtschaft, Polizei und Cameralwissenschaft, mit mehreren wichtigen, ganz neuen oekonomischen Entdeckungen versehen.* Six folding engraved plates & two folding printed tables. 12 p.l., 574 pp., one leaf of errata; 2 p.l., 522 pp., one leaf of errata. Two vols. 8vo, cont. blue paste-paper boards, contrasting leather lettering pieces on spines. Nuremberg: C. Weigel & A.G. Schneider, 1790-91. \$1250.00

First edition and rare; there is no copy in *N.U.C.* or OCLC. Parrot (1751-1812), German polyhistor, was professor of philosophy at Erlangen and later became district magistrate in several German cities. He wrote many works on mathematics, physics, geography, astronomy, and public finance and administration.

The present wide-ranging work focuses on farming; forestry; agriculture; the cultivation and manufacture of wine, tobacco, hops, coffee; managing gardens, fisheries, livestock; production of wool; etc., etc., etc.

Fine and handsome set. Old library stamp on titles of the Standeherrschaft, Königsbrück, with release stamp. Stamp on verso of titles and of each plate of the Sächsische Landesbibliothek Dresden, with release stamp.

• *A.D.B.*, Vol. 25, p. 184.

42. REBER, G. *Grundsätze der Wald-Taxation, Wirtschafts- Einrichtung und Waldwerths- Berechnung.* Two folding printed tables & numerous tables in the text. xi, 232 pp.; 89 pp.; 70 pp. Three parts in one vol. 8vo, cont. green morocco-backed green boards, flat spine nicely gilt, orange leather lettering piece on spine. Bamberg: J.C Dresch, 1827. \$950.00

First edition and very rare with no copy in the U.S., according to OCLC. Reber was "Herzoglich Leuchtenbergischen Oberforstmeister und Forstrath." As methods of valuing forests improved during the second half of the 18th century, the ability to tax the owners of forests also improved. The present work is a

comprehensive guide to the methods of calculating the value of forests.

Fine and pretty copy.

• Mantel, I, 524.

43. SCHAEBLER, Joseph. *Kurze jedoch hinreichende Theorie der Geometrie und Trigonometrie samt dem Wesentlichen der Praxis für Förster, Jäger und andere Feldmesser dieser Art.* Two folding engraved plates. viii, 112 pp. 8vo, cont. mottled sheep-backed paste-paper boards (covers abraded), contrasting vellum lettering piece on spine. Landshut: A. Weber, 1796. \$1250.00

First edition and very rare; no copy in listed in OCLC. This is a detailed account of the recently developed methods of computing the volume and mass of trees employing geometry and trigonometry. We learn from the title-page that Schäbler was an instructor of mathematics at the University of Dillingen.

Apart from the abrasions, a fine copy with the bookplate of Graf von Seinsheim.

• Not in Mantel.

44. SCHNEE, Gotthilf Heinrich. *Allgemeines Handbuch für Land- und Hauswirthschaft in alphabetischer Ordnung, oder Naturhistorisch-Oekonomisch- Technologisches Handwörterbuch für Land- und Hauswirthe.* One engraved plate & numerous woodcut illus. in the text. vi, [v]- vi, 330, [1], [331]-715, [1], 723-724 pp. Large 4to, cont. turquoise boards (extremities a bit worn), contrasting leather lettering piece on spine. Halle: Hemmerde & Schwetschke, 1819. \$1350.00

First edition of one of the chief dictionaries of the time concerning farming, forestry, and household management. Schnee (1761-1830), was a clergyman and writer of numerous books on farming, horticulture, forestry, and home economics.

The present work is extremely wide-ranging and inclusive; there is much on the making of beer and wine.

Fine copy. Old library stamp on title of the Standeherrschaft, Königsbrück, with release stamp.

• A.D.B., Vol. 32, pp. 89-90.

45. SEUTTER VON LOETZEN, Johann Georg von. *Versuch einer Darstellung der allgemeinen Grundsätze der Forstwirthschaft nach ihren Verhältnissen zu der Staats- Cameral- und Landwirthschaft nebst einigen*

Bemerkungen über die Folgen der Veräusserung der Staats- und Vertheilung der Gemeindswaldungen. One folding printed table. xxiv, 570 pp. 8vo, cont. mottled half-sheep & paste-paper boards, contrasting vellum lettering piece on spine. Ulm: Becker, 1804. \$1250.00

First edition. Seutter (1769-1833), forester and financier, served a chief of forests in various parts of Germany where he was well-known for initiating numerous organizational changes and reforms. This is an important contribution by Seutter to forest management.

Fine copy from the library of the Graf von Seinsheim.

☛ Mantel, I, 22.

46. SEUTTER VON LOETZEN, Johann Georg von. *Vollständiges Handbuch der Forstwirthschaft. Erster Theil. Allgemeine Ansicht der Forstwirthschaft und Regeln der Holzzucht und Holzverwerthung. [Erster Theil. Zweyter Band. Forstbotanik oder Beschreibung aller im Freyen des deutschen Klimas vegetirenden Holzpflanzen. Nach einem neuen, auf allgemein sich darstellende äussere Unterscheidungszeichen begründetem Systeme der Zusammenstellung verwandter Geschlechter und Arten].* One large folding printed table. 9 p.l., 764 pp.; 20 p.l., 552 pp. Two vols. 8vo, cont. half-sheep & paste-paper boards, contrasting vellum lettering pieces on spines. Ulm: Stettin, 1808-10. \$1350.00

First edition and very rare; OCLC locates no copy in the U.S. This is the author's most comprehensive work on forest management. Vol. I provides very detailed instructions on regulating and valuing forests. The second part is devoted to a discussion of the species of wood and their uses.

Fine and handsome set. Bookplate of Graf von Seinsheim.

☛ A.D.B., Vol. 34, pp. 68-70. Mantel, I, 25.

47. WERNECK, Ludwig Friedrich Franz, Freiherr von. *Vollständiger Forstcalender, worinnen alle einem Förster obliegende Verrichtungen von Monat zu Monat angezeigt werden, nach der angenommenen Ordnung Hrn. Johann Gottlieb Beckmanns, Forstinspectors in Wolkenburg, mit gründlich unterrichtenden Anmerkungen und Belehrungen zu ausführlicher Beschreibung und Taxirung des Forstes, Schätzung des Nutzholzes, Abfuhr des Holzes und Anlegung der Holzwege, nebst genauen und deutlichen Tabellen und Rissen, auch ausführlichern Ausrechnungen, dann einer anatomischen Zergliederung des Baumes, und andern zur Forstwissenschaft unentbehrlichen Stücken*

vermehrt. Ten folding engraved plates & three folding printed tables. 6 p.l., 382 pp. 8vo, cont. half-sheep & paste-paper boards (first few leaves a little foxed), cont. vellum lettering piece on spine. Breslau: J.F. Korn the Elder, 1777. \$1500.00

First edition and very rare. This is a month-by-month account of the activities and duties of a professional forester in the 18th century. It is based on the influential writings of Johann Gottlieb Beckmann, one of the most important of the early German writers on forest management.

Fine copy from the library of Graf von Seinsheim.

* * * * *

Not Sold at Auction

48. GINGUENÉ, Pierre Louis. *Catalogue des Livres de la Bibliothèque de feu M. P.-L. Ginguéné*. xxiv, 352 pp. 8vo, orig. blue paste-papers wrappers (wrappers a little frayed), uncut. Paris: Merlin 1817. \$1250.00

The sale of this library, tentatively fixed for February, 1818, if no buyer could be found, was sold en bloc to the British Museum, no doubt on account of its important collection of Italian books, separately catalogued by the late owner himself in Italian, and separately listed in the second section of 1675 lots. Ginguéné (1748-1816), had the varied career of many intellectuals who lived through the Ancien Régime, the Revolution (he narrowly escaped execution), the post-revolutionary and Napoleonic eras. He served in the finance ministry and supported the Revolution but his criticism of its excesses led him to be imprisoned with his friend André Chenier. The Directory sent Ginguéné as French ambassador to the King of Sardinia and he held office under Napoleon. His greatest work is the *Histoire littéraire d'Italie* (1811-19). "As a close friend of Piccinni, Ginguéné took part in the controversy against the Gluckists . . . He was joint editor with N.E. Framery of the musical part of the *Encyclopédie Méthodique*. At his death his library of about 3000 books, including several MSS of airs and chansons by J.J. Rousseau, was acquired by the British Museum."—*New Grove*, Vol. 7, p. 391.

The catalogue has an introduction by Dominique-Joseph Garat, count of the Empire, and reprints the funeral oration by P.-C.-F. Daunou, Napoleon's national archivist.

Very good copy. 2686 and 1675 lots.

♣ Grolier Club, *Printed Catalogues of French Book Auctions . . . 1643-1830*, 569.

*“A Work of Utmost Consequence in the Development
of the Theory of Evolution”*

- 49. GOETHE, Johann Wolfgang von.** *Versuch die Metamorphose der Pflanzen zu erklären.* 3 p.l., 86 pp. 8vo, cont. marbled boards (some foxing throughout as is usual), flat spine gilt, red leather lettering piece on spine. Gotha: C.W. Ettinger, 1790. \$3750.00

First edition, first issue. “A work of utmost consequence in the development of the theory of evolution...A forerunner of Darwin in many respects, [Goethe] believed in organic evolution. He coined the word ‘morphology.’ In *Versuch die metamorphose der pflanzen zu erklären* (1790), Goethe advanced the theory that all parts of flowers are metamorphosed or modified.”—Sparrow, *Milestones of Science*, p. 30 & number 86.

Attractive copy.

♣ Pritzel 3452. Singer, *A History of Biology*, pp. 215-17.

Goethe’s Important Contributions to the Sciences

- 50. GOETHE, Johann Wolfgang von.** *Zur Naturwissenschaft überhaupt, besonders zur Morphologie.* Nine engraved plates (one of which is folding & hand-colored) & one folding printed table. Six parts in two vols. 8vo, orig. printed orange-colored wrappers bound in cont. half-cloth & marbled boards (spines a little faded, occasional light browning), manuscript paper labels on spines. Stuttgart & Tübingen: J.G. Cotta, 1817-20-20-22-23-24. \$8500.00

First edition and a book of considerable rarity. This is a collection of Goethe’s biological, botanical, and scientific writings, issued in parts over an eight-year period. It is most unusual to have all six parts, with their original printed wrappers present, and bound in a contemporary binding.

The volumes contain Goethe’s important contributions to evolution (he coined the word “morphology”), color theory, geology, anatomy, zoology, botany, meteorology, etc.

Fine set.

♣ Hagen 504.

In a Pretty Contemporary Binding

- 51. GROBERT, Jacques François Louis.** *Machine pour mesurer la vitesse initiale des mobiles de différens calibres, projetés 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.

52. GROSSSCHEDEL VON AICHA, Johann Baptist. *Proteus Mercurialis Geminus, exhibens naturam Metallorum, id est, Operis Philosophici Theoriam & eiusdem praxin, sive Compositionem Lapidis secreti per Philosophorum sententias & auctoritates elucidatus. Quod clarius ex Titulis unicuique tractatui praefixis, cuius legenti facile patebit.* 195 pp. 8vo, attractive antique calf-backed speckled boards, spine gilt, red morocco lettering piece on spine. Frankfurt: L. Jennis, 1629. \$2950.00

First edition. "Rare. An alchemical work, describing the mythical Philosopher's Stone and also giving valuable information on chemical manipulation, although cloaked in the dense alchemical prose. The second section describes a variety of metals and minerals used in alchemical experiments . . .

"Each of the two parts has its own special title page: 'Discursus philosophicus de natvra metallorvm, et lapide philosophorvm, ex vergis magiae naturalis fundamentis depromptus, publicaeque vtilitati traditus' (p. 9-104) and 'Mineralis, seu, physici metallorvm lapidis diligens et accurata descriptio: ad macro- et microcosmi philosophicam metamorphosin' (p. 105-195)."—Schuh, *Mineralogy & Crystallography: A Bibliography, 1469 to 1920* (in progress), 1997.

A very fine copy from the Solms ducal library at Lich with their early stamp on title.

• Duveen, p. 271. Ferguson, I, pp. 347-48. Neville, I, p. 554—"an alchemical work of some importance" (having only the 1706 reprint).

*“A Great Classic that Formed the Basis of
Modern Physical Education”*

53. GUTS MUTH, Johann Christoph Friedrich. *Gymnastik für die Jugend. Enthaltend eine Praktische Anweisung zu Leibesübungen. Ein Beytrag zur nöthigsten Verbesserung der körperlichen Erziehung.* Engraved frontis. & ten engraved plates (one folding). xviii, [18], 663, [1] pp. 8vo, cont. half-calf & marbled boards (lower cover a bit wormed), red morocco lettering piece on spine. Schnepfenthal: im Verlage der Buchhandlung der Erziehungsanstalt, 1793. \$2950.00

First edition of the author's first and best-known work; it is a "great classic that formed the basis of modern physical education . . . the first manual published by a practical physical educator . . . Ch. 6 to 15 are devoted to different physical exercises: high jumping, pole vaulting, jumping across a ditch; throwing a wooden discus, archery; running, skipping rope; wrestling; walking on the balance beam, balancing rods on the fingers; lifting, carrying, pulling; going up and down a rope ladder, swinging on vertical ropes, climbing a mast; dancing, skating and long walks; bathing and swimming. Ch. 17 and 18 deal with declaiming and exercises of the senses: reading out loud so as to be heard by a person stationed at various distances and estimating distance with the naked eye. The final chapters are on manual labour and training."—Hagelin, *Kinetic Jottings*, pp. 104-05.

Guts Muth (1759-1839), was a teacher at a school in Schnepfenthal, at the foot of the Thuringian forest. A small court among the oak trees was prepared for the daily lessons in gymnastics.

The charming and well-engraved plates depict equipment and the boys performing the various exercises.

Fine copy.

☛ Waller 3888.

54. HERMBSTAEDT, Sigismund Friedrich. *Anleitung zur Fabrikation des Syrups und des Zuckers aus Stärke, aus Ahornsaft, aus Weinmost, aus Aepfeln oder Birnen, aus Pflaumen, aus Moorrüben, aus Mays, &c. Nebst Anweisung dieselben Substanzen zur Fabrikation des Branntweins und des Essigs in Anwendung zu setzen.* viii, 191 pp. 8vo, unbound in the orig. signatures. Berlin: Realschul-Buchhandlung, 1814. \$1950.00

First edition of a very scarce book. Hermbstädt (1760-1833), the first chemist in Germany to adopt Lavoisier's views, was professor of technological chemistry at the University of Berlin.

Due to food shortages and supply disruptions caused by the Napoleonic wars, Europe was constantly searching for substitute food staples, especially sugar. In

this work, Hermbstädt describes his experiments in which he extracted sugar from various fruits and from corn.

Fine copy, uncut and unopened in the original unbound signatures.

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

“Hevelius’s Classic Description”

55. HEVELIUS, Johannes. *Mercurius in Sole visus Gedani, Anno Christiano M DC LXI, d. III Maji...cui annexa est, Venus in Sole pariter visa, Anno 1639, d. 24 Nov....a Jeremia Horroxio: nunc primum edita, notisque illustrata.* Finely engraved vignette on title & ten fine engraved plates. Printed tables in the text. 3 p.l., 181 pp. Folio, modern vellum-backed marbled boards (first two leaves with faint marginal dampstaining). Danzig: Autoris typis, et Sumptibus, imprimebat S. Reiniger, 1662.

\$19,500.00

First edition of one of Hevelius’s most important publications; privately printed, this rare book contains “Hevelius’s classic description of his observation of the transit of Mercury, in 1661, across the face of the sun. The work also contains the description by Jeremiah Horrocks, of the transit of Venus on November 24, 1639, published here posthumously [and for the first time] as supplied by Huyghens. At the end is the history of the discovery of the variable star *o Ceti* by Fabricius, with own observations of Hevelius carried on between 1638-1662.”—B.Y.U., *Johannes Hevelius* (1971), 7.

As mentioned above, this work contains the first printing (pp. 111-45) of Horrocks’s observation of the transit of Venus, the first ever made; it is also the very first appearance in print of any of Horrocks’s writings. Hevelius has added numerous annotations to the text of Horrocks.

A fine and large copy. Bookplate of Marcel Destombes.

• Lalande, p. 252.

Hoe’s Own Copy, Especially Bound for Him at The Club Bindery

56. (HOE, Robert). *One Hundred and Seventy-Six Historic and Artistic Book-Bindings dating from the Fifteenth century to the Present Time. Pictured by Etchings, Artotypes, and Lithographs after the Originals selected from the Library of Robert Hoe.* Fine plates (some in color). Titles in red & black. Two vols. Very large 4to, cont. gold-tooled green morocco over heavy pasteboard, two sets of triple fillets round sides, outer border of drawer hands, inner border of floral ornament, surrounding a wide & richly gilt

dentelle composed of individual tools including the collector's monogram in corners, spines decorated in compartments with the same tools & letters (spine slightly faded), dark blue morocco doublures with roll-tooled boards, a.e.g. New York: Dodd, Mead, 1895. \$12,500.00

The perfect association copy of this lavish work: it is Robert Hoe's own set, especially bound for him at The Club Bindery and dated 1905. Limited to 200 copies only and printed on Imperial Japanese paper, the work greatly influenced American book collecting. A magnificent catalogue of this important selection of bindings from the library of America's greatest book collector.

The Club Bindery was established by The Grolier Club which brought several of Europe's most important binders to New York. During 1895-1909 they produced the finest bindings in America.

Fine set preserved in strong cloth boxes. Bookplate of Robert Hoe, first President of The Grolier Club (his sale 1911-13, Anderson Galleries, lot 1706) — T.J. Coolidge, Jr. (armorial bookplate).

• Breslauer, *The Uses of Bookbinding Literature*, p. 18—"splendid."

57. HOET, Gérard, the Younger. *Catalogus of Naamlyst van Schilderyen, met derzelver Pryzen zedert een langen reeks van Jaaren zoo in Holland als op andere Plaatzten in het openbaar verkogt. Benevens een Verzameling van Lysten van Verscheyden nog in wezen zynde Cabinetten.* First title printed in red & black. xii, 614, [6] pp.; iv, 538, [24] pp. Two vols. 8vo, late 19th-cent. green half-morocco & marbled boards (extremities a little rubbed), uncut. The Hague: P.G. van Baalen, 1752. \$2500.000

First edition of this uncommon and extremely useful compilation of the results of painting auctions which took place in the Low Countries from 1676 to 1752. Most of the sales took place in Amsterdam, The Hague, and Dordrecht but many auctions in Antwerp and Brussels are included. This work is one of the earliest "art at auction" indexes ever compiled.

Hoet (1698-1760), was the eldest son of Gérard Hoet the Elder (1648-1733), one of the leading painters of his time in the Low Countries (see *N.B.G.* and *Benezit*). The son was also a painter but, in addition, established himself as a picture dealer.

This work is absolutely invaluable as it lists sales by owners' names, many of whom are completely or nearly unknown. In many cases, this book contains the only record of the collections and sales as the printed catalogues have not survived. Approximately 10,000 paintings are listed. Prices realized are given for every lot. Hoet has provided a valuable service by giving at the end of each volume two indexes, one giving owners' names and another arranged by artist.

Very good set of a work which provides a unique view of the taste in art

collecting and the art trade in 17th- and 18th-century Holland and Belgium.

• OCLC attributes this catalogue to Hoet the Elder but this is clearly wrong.

*“A Work that Ranks Second Only to the Principia
of Newton”—Cajori*

58. HUYGENS, Christian. *Horologium Oscillatorium. Sive de Motu Pendulorum ad Horologia aptato Demonstrationes Geometricae.* Woodcut printer’s device on title, a full-page woodcut of the pendulum clock mechanism, & numerous woodcut diagrams & tables in the text. 7 p.l., 161, [1] pp. Folio, cont. mottled sheep (some early & expert restorations to binding, two small & unimportant marginal wormholes in first half of book), spine richly gilt, red morocco lettering piece on spine. Paris: F. Muguet, 1673. \$55,000.00

First edition, and a fine, large, and crisp copy, of “a work that ranks second only to the *Principia* of Newton and constitutes historically a necessary introduction to it...

“The book opens with a description of pendulum clocks, of which Huygens is the inventor. Then follows a treatment of accelerated motion of bodies falling free, or sliding on inclined planes, or on given curves, — culminating in the brilliant discovery that the cycloid is the tautochronous curve. To the theory of curves he added the important theory of ‘evolutes.’ After explaining that the tangent of the evolute is normal to the involute, he applied the theory to the cycloid, and showed by simple reasoning that the evolute of this curve is an equal cycloid...

“Then comes the complete general discussion of the centre of oscillation. This subject had been proposed for investigation by M. Mersenne and discussed by R. Descartes and G.P. Roberval. In Huygens’ assumption that the common centre of gravity of a group of bodies, oscillating about a horizontal axis, rises to its original height, but no higher, is expressed for the first time one of the most beautiful principles of dynamics, afterwards called the principle of the conservation of *vis viva*. The thirteen theorems at the close of the work relate to the theory of centrifugal force in circular motion. This theory aided Newton in discovering the law of gravitation.”—Cajori, *A History of Mathematics*, p. 183.

“His magnum opus, *Horologium oscillatorium*, stands as a solid symbol of the force of the mathematical approach and was recognized as such by Huygens’s contemporaries. Compared to the relatively simple mathematical tools which Galileo used in his works, the wealth of mathematical theories and methods that Huygens was able to apply is significant, and herein lies the direct and lasting influence of his work.”—D.S.B., VI, p. 612.

• Dibner, *Heralds of Science*, 145. Evans, *Epochal Achievements*, 31. Horblit 53. *Printing & the Mind of Man* 154—“the most original work of this kind since

Galileo's *Discorsi*." Roberts & Trent, *Bibliotheca Mechanica*, pp. 170-71. Sparrow, *Milestones of Science*, 109.

"A Monument of its Time"

59. KEPLER, Johannes. *De Stella Nova in Pede Serpentarii, et qui sub eius exortum de Novo iniit, Trigono Igneo. Libellus Astronomicis, Physicis, Metaphysicis, Meteorologicis & Astrologicis Disputationibus.* One double-page engraved plate & numerous woodcut diagrams in the text. 6 p.l., 212, 35, [3] pp., 1 blank leaf. 4to, late 17th-cent. or early 18th-cent. sheep (light browning & foxing as is usual, unimportant occasional marginal dampstaining), spine gilt. Prague: Printed by P. Sessius at the expense of the Author, 1606.

[bound with]:

SNEL(L), Willebrord & ROTHMANN, Christoph. *Descriptio Cometae, qui anno 1618 mense Novembri primum effulsit. Huc accessit Christophori Rhotmannii Ill. Princ. Wilhelmi Hassia Lantgravii Mathematici descriptio accurata cometae anni 1585.* Printer's device on title & several woodcut diagrams in the text. 4 p.l., 156 pp. 4to (occasional unimportant light stain). Leyden: Elzevir, 1619. \$75,000.00

A most appealing *sammelband* of two important astronomical works.

I. First edition. Early in October 1604, a new star appeared in the constellation Serpentarius (now called Ophiuchus). On the seventeenth of the month, when Kepler first observed it, the new star had been joined in Serpentarius by a rare conjunction of all three outer planets. Such conjunctions were believed by many astrologers to recur at two-hundred year intervals. Kepler's book deals successively with the astronomical, physical, and astrological aspects of the phenomenon. He supports Tycho's view that such new stars are located in the — no longer immutable — regions of the fixed stars. He also rejects the possibility that the entire occurrence is merely accidental but refuses to make any precise prognostications. In an appendix Kepler speculates that a similar phenomenon may have taken place at the time of Christ's birth, thereby confirming his belief that our time reckoning begins four or five years too late.

II. First edition of these important observations on the comets of 1585 and 1618. The first part, by Snell, concerns the 1618 comet. This comet not only provoked the famous astronomical dispute between Galileo and the Jesuits but also was the occasion for numerous books and pamphlets. In this work, Snell (1580-1626), who had studied with Brahe, Kepler, and Mästlin, the teacher of Kepler, "eliminated terrestrial vapors as a possible origin of comets because his own parallax measurements placed the comet of 1618 above the Moon."—Yeomans,

Comets, p. 62.

Snell used the occasion of this work to publish the observations of Rothmann on the 1585 comet, using manuscripts preserved at Kassel. Rothmann (fl. 1590), was *mathematicus* to Wilhelm IV of Hesse at his observatory at Kassel, where he collaborated with Wilhelm on the preparation of his star catalogue. He visited Brahe in 1590 and conducted an extensive correspondence with him. The comet of 1585 "led to an exchange between Tycho in Hven and William IV and Rothmann in Kassel that lasted for six years... This correspondence covered all aspects of contemporary astronomy: instruments and methods of observing, the Copernican system (which Rothmann supported against Tycho's system), comets, and auroras."—*D.S.B.*, XI, p. 561. Rothmann's text discusses the nature of comets, parallax, and the Copernican system. See *D.S.B.* for entries on Wilhelm IV and Rothmann.

Very good copies. Early signature of "Verniquet" at foot of title of Kepler.

☛ I. Caspar 27. *D.S.B.*, VII, pp. 288-89—"a monument of its time." Gingerich, *Rara Astronomica*, 28. II. Bierens de Haan 4393. Lalande, p. 173.

The History of Salt

60. KOCH-STERNFELD, Josef Ernst, Ritter von. *Die teutschen, insbesondere die bayerischen und österreichischen Salzwerke zunächst im Mittelalter; als Anlagen und Bürgschaften des Cultus, der Cultur, des König-, Adel- und Bürgerthums und der grossen Masse; mit Betrachtungen über das europäische Salzregale, in seiner Entwicklung und Verwicklung.* xl, 132 pp.; 388 pp. 8vo, orig. green boards, printed paper label on spine, uncut. Munich: G. Jaquet, 1836. \$1250.00

First edition of this massive and important history of the salt mining industry in Germany; the text includes much on the trade in salt. Koch-Sternfeld (1778-1866), a German historian and archeologist who studied at Salzburg and Vienna, describes here the mining of salt, particularly in Bavaria and Austria from ancient times to the end of the 18th century. He outlines methods of manufacturing the salt from brines, the trade in salt, the economics of the salt trade, and the religious symbolism which salt attained in the early periods. There is much on the manufacture of salt in other countries of Europe. Many individual salt mines and salt factories are described in considerable detail.

Very fine copy in original state.

☛ *A.D.B.*, Vol. 51, pp. 294-96.

61. KUNST-BUECHLEIN, *Oder Gründlicher Gebrauch von Ertz-Arbeit, in und ausserhalb Feuers aus Alchymischen und natürlichen Grunde, nemlich, Härten, Weichen, Schmelzen, Scheiden, Abtreiben, Probieren...Wie auch Jede Farben zubereiten, erhalten, bessern und wiederbringen: als zum Mahlen, Schreiben, Illuminiren, Vergulden, Stücken, Edelmetallen. Neben beygefügetem Register.* 203, [6] leaves (the final two leaves are blank). 12mo, cont. vellum-backed wooden boards (some wear & rubbing, light foxing & dampstaining throughout), boards covered in cont. marbled paper. Frankfurt & Leipzig: J.C. Meyer, 1687. \$3750.00

One of the last in the series of *Kunstbüchlein* or “book of secrets.” It is very rare and OCLC locates no copy in the U.S. The *Kunstbüchlein* was first published in 1535; by their very nature all editions are extremely rare. “It is one of the genre known in English as ‘books of secrets’, and contains vernacular receipts for tempering iron and steel, etching and colouring metal, removing stains from cloth, making inks, colours and dyes, and for various other chemical preparations. Its material was in part already of considerable antiquity, and it was to have an extensive life-span in printed form, appearing in many editions and translations, in extract and combination with other material, according to Ferguson at least until 1720...It was clearly very influential...Its audience...consisted of craftsmen and artisans.”—David L. Paisey, “Some Sources of the ‘Kunstbüchlein’ of 1535” in *Gutenberg Jahrbuch* (1980), pp. 113 & 115.

The *Kunstbüchlein* is a compilation from four existing printed sources:

1. *Allerley Mackel und Flecken* (1st ed.: 1532). This is the first printed book on spot removing and dyeing.

2. *Von Stahel und Eysen* (1st ed.: 1532). It is the first book on the subject of the hardening of steel and one of the earliest books on the art of etching steel and iron plates. There are also important passages on making gold-colored varnishes.

3. *Artliche künste, mancherley weyse Dinten und aller hand farben zubereyten* (1st ed.: 1531).

4. *Rechter Gebrauch d’Alchimei* (1st ed.: 1531).

The *Kunstbüchlein* is of the greatest interest for the history of metallurgy, art history, and technological chemistry. It contains a number of metallurgical recipes of importance, including advice on such operations as hardening steel, soldering and brazing, amalgamation, gilding, making metal powders, and casting medallions, as well as that interesting antecedent to the flotation process, the purification of lapis lazuli by mixing with a greasy paste and kneading under water.

Good copy.

• Darmstaedter, *Berg-, Probir- und Kunstbüchlein*, pp. 37-60. Ferguson, I, p. 486. Ferguson, *Some Early Treatises on Technological Chemistry*.

62. 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.

"The Most Splendid of all Canal Books"

63. LALANDE, Joseph Jérôme Le François de. *Des Canaux de Navigation, et spécialement du Canal de Languedoc.* 14 engraved plates (5 are folding). 2 p.l., xix, [1], 588 pp. Folio, cont. mottled calf (two corners a little worn), spine gilt, red morocco lettering piece on spine. Paris: la Veuve Desaint, 1778. \$4500.00

First edition of this handsome work written by the great astronomer. "This is the first major account of the 17th century Canal du Midi. It covers the background history of Riquet's extraordinary and influential project together with details of its construction, administration, and 'Anecdotes Diverses' . . . The work is a valuable source of information on many other French canals such as the Briare (forerunner of the Midi) and the Orléans as well as smaller regional waterways and various unexecuted schemes. It also contains sections on canals all over Europe, Asia, Africa, America and China. All his life Lalande was known for his love of the spectacular; in this case it has resulted in the most splendid of

all canal books."—Julia Elton in Weinreb, *Cat. 50*, item 130.

Very good copy.

The Milky Way

64. LAMBERT, Johann Heinrich. *Cosmologische Briefe über die Einrichtung des Weltbaues.* One folding printed table. xxviii, 318 pp. 8vo, attractive early 19th-cent. blue marbled boards with red paper spine (lower joint with a few chips), spine gilt. Augsburg: E. Kletts, 1761.

\$5000.00

First edition of one of the most important works in stellar astronomy. "Lambert had the idea (in 1749) [but published here for the first time] that what appears as the Milky Way might be the visual effect of a lens-shaped universe. On this basis he elaborated a theory according to which the thousands of stars surrounding the sun constituted a system. Moreover, he considered the Milky Way as a large number of such systems, that is, a system of higher order... These bold speculations, born of the Leibnizian belief in the most perfect of all possible worlds, far transcended astronomy... the *Cosmologische Briefe* was a great sensation and was translated into French, Russian, and English. Only when William Herschel systematically examined the heavens telescopically and discovered numerous nebulae and 'telescopic milky-ways' did it become obvious that Lambert's description was not mere science fiction but to a large extent a bold vision of the basic features of the universe."—*D.S.B.*, VII, p. 598.

A fine copy.

65. LAMPADIUS, Wilhelm August. *Sammlung practisch-chemischer Abhandlungen und vermischter Bemerkungen.* Two folding engraved plates & five folding printed tables. 6 p.l., 235 pp.; 4 p.l., 233, [1] pp.; 2 p.l., 250, [2] pp. Three vols. 8vo, cont. half-sheep & boards (spines somewhat worn), spines gilt. Dresden: Walther, 1795-97-1800.

\$2650.00

First edition and very rare. This is one of the author's earliest publications, in which he first declares that he supports the antiphlogistic theory of Lavoisier (vol. I, p. 131 et seq.), although he had previously opposed it. From this time onward, Lampadius made the antiphlogistic theory the basis of his lectures. He analyzed numerous minerals, including honeystone (aluminum mellitate), which he found to contain over 85 percent carbon, with alumina, silica, and water (vol. II, pp. 51-52, 135-144). In the third volume Lampadius describes the deflagration that occurs when charcoal is added to fused caustic alkali (sodium hydroxide), which he attributed to reduction and reoxidation... In this collection

of his miscellaneous researches, Lampadius first demonstrates that elementary phosphorus does not luminesce in perfectly dry air. The final volume of this very rare work remained unknown to Poggendorff, who cites only the first two volumes."—Neville, II, p. 7.

Lampadius (1772-1842), pharmacist and later professor of chemistry and mineralogy at the famous Mining Academy at Freiberg, is best known for his discovery of carbon disulfide. He is considered to be one of the founders of metallurgy.

Very good set.

♣ Partington, III, p. 597. Poggendorff, I, 1361-62.

Falconer Madan's Copy

66. LEMOINE, Henry. *Typographical Antiquities. History, Origin, and Progress, of the Art of Printing, from its First Invention...and from its Introduction into England, by Caxton, to the Present Time;...with Chronological Lists of Eminent Printers in England, Scotland, and Ireland...also a particular...History of the Walpolean Press, established at Strawberry Hill...at the Conclusion is given a Curious Dissertation on the Origin of the Use of Paper.* iv, [5]-156 pp. 8vo, modern calf-backed marbled boards, red morocco lettering piece on spine. London: S. Fisher, 1797.

\$1250.00

First edition. In 1777, Lemoine (1756-1812), "purchased a bookstall in the Little Minories, and devoted his leisure to writing for the magazines. He also dispensed drugs and specifics of various kinds, especially a freely advertised 'bug-water'."—*D.N.B.*, XI, p. 907—(and see the rest of the article for more about this charming man who ended up selling books on the street and doing much literary hack work in public houses. While greatly industrious, he cared little for money and his habits were too "convivial." He was regarded as being one of the best judges of old books in England).

Very good copy. With the stamp on title of Falconer Madan, the great Oxford bibliographer.

♣ Bigmore & Wyman, I, p. 431—"It is throughout carefully done... the notices on contemporary printers are worthy of perusal."

*With 344 Original Watercolors of Minerals;
Goethe was a Subscriber;
With the Prospectus*

67. LENZ, Johann Georg. *Mustertafeln der bis jetzt bekannten einfachen Mineralien worauf dieselben nach ihren Gestalten und natürlichen Farben abgebildet, und ihre übrigen Verhältnisse gegen einander bestimmt werden.* 344

original watercolors in the text. 4 p.l., 111, [1] pp. 8vo, orig. deluxe binding of pale blue silk covered boards (binding partly faded & with an unimportant bit of wear), covers panelled in gilt, a.e.g. Jena: Printed at the Expense of the Author, 1794. \$65,000.00

First edition of a milestone in the history of mineralogy and one of the most beautiful and rare books in the literature. This is the first general illustrated field guide to minerals and “is unique among published colorplate mineralogies in that the plates are *not* merely hand-colored engravings, but pure originals each painted from scratch without benefit of engraved outlines or guidelines.”—Wendell E. Wilson, “Johann Georg Lenz and his *Mustertafeln* (1794)” in *The Mineralogical Record*, Vol. 27, No. 3 (May-June 1996), p. 192 (& see the entire article — pages 191-95 — for a finely detailed and well-illustrated account of this book).

This is a very rare privately printed work which contains 344 original and meticulously prepared watercolors of minerals. Only a few copies of this book were printed due to the enormous labor involved in making the illustrations; the list of subscribers contains just 22 names (subscribing to 26 copies), including those of Goethe and Trebra (both of whom went on mineral collecting expeditions with Lenz).

Lenz (1748-1832), professor of mineralogy at the University of Jena and inspector of the mineral cabinet of Duke Carl August of Saxe-Weimar (his cabinet was the basis for the present book), wrote a long series of books on mineralogy. Lenz was influenced by the theories of Werner regarding the chemical classification of minerals and the identification of minerals through their external characteristics. He was a founding member of the *Societät für die gesammte Mineralogie zu Jena*, the first scientific society to be devoted exclusively to mineralogy.

“In order to help finance the expensive production of the *Mustertafeln*, Lenz’s friends and supporters ordered and paid in advance for 26 copies. The prepublication announcement had stated that the *Mustertafeln* would be sold only by prepaid order, at a price of 8 Saxon Reichsthaler. Only enough copies to fill the prepublication orders would be produced. Lenz gives a list of these people. The Duchess Anna Amalia, of course, took one for herself and one for Karl August (though he is not mentioned by name), Goethe took one, and Von Trebra took another. Other subscribers included the Duke of Gotha, the Bishop of Dahlberg, the Prince of Anhalt-Dessau, Louis X (1753-1830), Landgrave of Hessen-Darmstadt, Prince Reuss Heinrich XV, the Count of Castell, Baron Joseph Friedrich von Racknitz (1744-1818), Baron Borck, Baron Poser, Archdeacon Löber, Ambassadorial Privy Councillor Friedrich Bertuch (1747-1822), Major Karl von Knebel (1744-1834), Professor Unger in Passau, Consistorial Assessor Dr. Stephani, Georg Sieveking (1751-1799) in Hamburg, a Göttingen University pharmacist named Sander, the Würzburg University Library and a distinguished Leipzig newspaperman who is not named...

“Were these 26 the only copies produced? No one knows, but if there were additional copies they surely were few, as the book is exceedingly rare today . . . Clearly this is an extremely rare book, much rarer than James Sowerby’s *Exotic Mineralogy*, for example . . .

“The *Mustertafeln* describes 400 ‘simple’ (‘einfachen’) minerals. This term was used to make the distinction between pure mineral crystals and polymineralic aggregates (‘mixed minerals’). Small paintings are provided for 344 of the numbered entries, one illustration sometimes serving for two or three different numbered species of more or less identical appearance, the practical points of distinction being detailed in the accompanying text. The minerals are presented in a sequence based on color, so that specimens to be identified by comparison can be looked up initially on the basis of their color alone . . .

“Six columns of descriptive information accompany each numbered species. The first column to the right of the illustrations is headed *Aeussere Gestalten* (‘External Shape’). The next is *Bruch* (‘Fracture/Cleavage’), followed by *Bruchstücke* (‘Cleavage fragment shape’), *Durchsichtigkeit und Glanz* (‘Transparency and Luster’), *Härte* (‘Hardness’), and finally *Namen der Mineralien* (‘Names of the Minerals’). Many of the mineral names are familiar to us today, and others are the products of their times . . .

“The specimen illustrations in Lenz’s *Mustertafeln* are neither large nor extremely detailed, but they represent by far the most extensive 18th-century colorplate documentation of a mineral collection. Because their purpose was to depict a *systematic* series of mineral species without regard to either (1) ore value or (2) crystal perfection and beauty, they provide us with the clearest contemporary image of what an 18th-century systematic mineral collection actually looked like . . . The *Mustertafeln* still stands as a rare and interesting milestone in the history of colorplate mineralogies.”—Wilson, op. cit.

Our splendid copy comes from the library of Franziska von Hohenheim (1748-1811), mistress and then wife of Karl Eugen, Duke of Württemberg. Franziska was a considerable book collector and one still see her books on the market upon occasion.

Laid-in is the original printed prospectus and a two-page sample of the book with six original watercolors.

We have located seven copies of this book: Germany (3 copies): Freiberg, Anna Amalia Bibliothek (did it survive the fire?), and Erfurt/Gotha University; U.K. (one copy): British Museum (Nat. Hist.); Australia (one copy): the former Obboda copy; and the U.S. (three copies): University of Illinois at Urbana, a private New York collector (to whom we sold a copy in 1991, see our Cat. 62), and the copy now offered for sale.

Fine copy. The watercolors are very fresh and bright.

• Schuh, *Mineralogy & Crystallography: A Bibliography, 1469 to 1920*, 2964—“one of the rarest colored mineralogies.”

Large & Thick Paper Set

68. **LE SEUR, Thomas & JACQUIER, François.** *Elemens du Calcul Integral*. Engraved arms of Duke Ferdinand on titles & eleven folding engraved plates. xii, 548, [1] pp.; vii (first leaf a blank), 591 pp. Two vols. 4to, cont. mottled sheep (joints and head & tail of spines with several careful repairs), gilt fleurons in each corner of covers, triple gilt fillet round sides, spines gilt, red & green morocco lettering pieces on spines. Parma: [pasted-over label]: "Chez les Freres Faure Libraires de Son Altesse Royale," 1768. \$6500.00

First edition and a fine large and thick paper set of this work which is now scarce on the market. This is one of the major works in the history of calculus, written by the editors of the Jesuits' edition of Newton's *Principia*. The authors were the principal expositors of Newtonian mathematics and physics in Italy. They resided in Parma from 1763 to 1773 as tutors to the young Duke Ferdinand and were intimate friends of many of the leading scientists of the time including Clairaut, Boscovich, and Mme. du Châtelet.

69. **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.

An Important Collection

70. LORI, Johann Georg von. *Sammlung des baierischen Bergrechts, mit einer Einleitung in die baierische Bergrechtsgeschichte.* Engraved vignette on title. 4 p.l., cxx, [16], 647 pp. Thick folio, cont. grey boards (binding with a little worming). Munich: F.L. Richter, 1764. \$2750.00

First edition, and quite rare, of this massive collection of Bavarian mining laws. "Sehr wichtige Quellensammlung zur Geschichte des bayerischen Bergrechts."—Lentner 15106. Lori, statesman, historian, and founder of the Bavarian Academy of Sciences, has provided an extensive history of German mining law in the preliminary leaves. More than 300 laws — ranging from 1285 to 1760 — are published here.

Fine copy in original state.

☛ A.D.B., 19, pp. 183-95. Hoover 545.

Gesner's Woodcuts

71. MATTIOLI, Pietro Andrea. *De Plantis Epitome utilissima...Novis plane, et ad Vivum expressis Iconibus, descriptionibusque; longè & pluribus & accuratiorib. nunc primum diligenter aucta, & locupletata, à D. Ioachimo Camerario...Compendium in eorum maxime gratiam atque usum adornatum, qui plantis conquirendis & indagandis student; ac, quæ de eis plurib. à Matthiolo in Dioscoridem disputantur, breviter descripta simul depictaq; oculis subjicere cupiunt. Accessit, praeter indicem quam exactissimum, liber singularis de itinere ab urbe Verona in Baldum montem plantarum ad rem medicam facientium feracissimum, auctore Francisco Calceolario...* Woodcut printer's device on title & 1003 woodcuts in the text. 6 p.l., 1003, [27] pp. Thick 4to, cont. limp vellum (binding with slight soiling), initials "P E F" on center of upper cover, covers panelled with stamped silver fillet, fleurons in silver stamped in each corner. Frankfurt: J. Feyrabend, 1586. \$7500.00

First Camerarius edition, containing the first appearance of the famous Gesner/Camerarius suite of woodcuts. Gesner had been preparing material for a massive "history of plants" but died before finishing. Camerarius acquired the material and used the woodcuts in the present work, supplementing them with

his own contributions.

The woodcuts are remarkable for their scientific detail, especially the enlarged depictions of floral structure, seeds, and fruit. This is the first time that such representations were consistently followed and marks the beginning of what became a standard in scientific botanical illustration.

Fine copy in a rather appealing contemporary limp vellum binding. Stamp on title of the Vienna University Botanical Institute. Bookplate of Kenneth K. Mackenzie, Horticultural Society of New York.

♣ Hunt 153.

72. MENIER & Cie. *Maison Centrale de Droguerie. Fondée en 1816...Prix Courant Général.* Full-page illus. of the factory at Noisiel-sur-Marne, 20 plates (mostly in color), & numerous illus. in the text. 264 pp. 8vo, orig. blind-stamped black cloth (one corner very slightly worn), upper cover stamped in gilt "Menier & Cie." Paris: 1854. \$1500.00

A very rare and wonderfully illustrated trade catalogue, issued by the famous Menier & Cie., founded in 1816 as a pharmaceutical manufacturer in Paris at a time when chocolate was used as a medicinal product and was only one part of the overall business. Eventually, Menier became one of the most well-known chocolate makers in the world.

"In 1816, Antoine Brutus Menier founded the Menier Hardware Company in Paris. Although not trained as a pharmacist, he began preparing and selling a variety of powders for medicinal purposes. The business grew rapidly but for the first few years the company's production of chocolate was very limited as its primary usage was as a medicinal powder and for coating of bitter-tasting pills...

"In 1825 the company began an expansion through the acquisition of a second production facility on land on the banks of the Marne River at Noisiel, at the time a small village of less than 200 inhabitants at the outskirts of Paris. Initially used as a grinding works for the production of medicinal powders, a modernization of the Noisiel facility in 1830 made it the first mechanized mass production factory for cocoa powder in France. Following the development of solid chocolate, Menier introduced to the market a block of chocolate wrapped in decorative yellow paper. By 1842, the success of the chocolate business led to another expansion of the Noisiel plant and by 1853 annual chocolate production reached 4,000 tons...

"Under the leadership of the founder's son, Emile-Justin Menier, the company concentrated solely on the manufacturing of chocolate products. In 1864 he sold off the pharmaceutical manufacturing part of the business and began a period of expansion that made the Menier Chocolate company the largest chocolate manufacturer in France."—*Wikipedia*.

This is a most attractive trade catalogue, issued when Menier was a general

pharmaceutical company. It contains twenty plates — all but two in color — depicting pharmaceutical equipment, labels for apothecary jars, etc. There are hundreds of illustrations in the text of other scientific instruments. The catalogue lists thousands of items, each priced.

Fine copy. Bookplate of Jean Sterlin.

Limited to 50 Sets

73. (MURRAY, Charles Fairfax). *Catalogo dei Libri posseduti* . . . 401 pp., 1 leaf; 187 pp. Two vols. in one. Large 4to, orig. printed boards (corners a bit worn), brown morocco lettering piece on spine. London [Rome]: 1899. \$1950.00

Limited to 50 copies only; privately printed and very rare. This is the best and most complete record of Murray's library. "Murray (1849-1919) was one of the most singular figures of the art world. Himself an artist of no mean distinction, he succeeded, although without any large means of his own, in accumulating . . . illuminated manuscripts . . . and, above all, books of every description. A friend of William Morris and Burne Jones, he owned the finest set of Kelmscott books in any library. His collections of early German, French, and especially Italian books were among the largest and choicest in private hands. If the Fairfax Murray library had been dispersed in one continuous series of sales, the event would have been truly sensational; unfortunately, the sales were spread over several years and no real system was followed. In addition, many of the finest books were sold privately."—De Ricci, p. 178.

A victim of polio in childhood, he was almost a dwarf, but had a head "worthy of a Michel Angelo or Titian" (De Marinis). He had two families: one, legitimate, in Florence, the other, bigamous, in London. Tammara De Marinis, in his essay "La Dispersion des livres de Charles Fairfax Murray" in *Deuxième Congrès Internat. de Bibliophilie, Actes*, (Paris, 1963), provides a detailed account of Fairfax Murray and his collections.

4659 books are described.

Very good set. A third volume, describing the Adda library at Milan and separately published in 1902, is not present as is usual.

A Classic of Experimental Science

74. 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. \$4950.00

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.

Three of His Most Important Collections of Writings

75. **NEUMANN, Caspar.** *Lectiones Publicae von Vier Subjectis Chemicis, Nämlich vom Salpeter, Schwefel, Spiess-Glas und Eisen, wie solche bey dem in Berlin gestifteten 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 publiciret, 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, nämlich vom Gemeinem Saltze, Weinstein, Salmiac und der Ameise, wie solche bey dem in Berlin gestifteten 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.

76. [NEWTON, Isaac]. *Arithmetica Universalis: sive De Compositione et Resolutione Arithmetica Liber. Cui accessit Halleiana Aequationum Radices Arithmetice inveniendi methodus. In Usum Juventutis Academicae.* 4 p.l., 343 pp. 8vo, fine antique panelled calf (faint & unimportant dampstaining in gutter to first & final few leaves), spine gilt, red morocco lettering piece on spine. Cambridge: Typis Academicis; London: B. Tooke, 1707.

\$15,000.00

First edition of what I believe to be the scarcest of all of Newton’s books on the market. This was, in the 18th century, the most popular mathematical work by Newton, being reprinted a number of times both on the Continent and in England. Newton compiled the *Universal Arithmetic* in a “cavalier fashion by plundering the papers connected with his *Observations on Kinckhuysen* early in the 1670s. Since things Newton touched had a way of turning to gold, the work did not merely summarize algebra but advanced the science — in its analysis of imaginary roots, for example. Leibniz reviewed the published work anonymously in the *Acta eruditorum* in highly laudatory terms [in 1708].”—Westfall, *Never at Rest. A Biography of Isaac Newton*, p. 398.

Newton’s disciple and successor in the Lucasian chair at Cambridge, William Whiston, edited and published the present work. The book also contains Halley’s “Method of finding Roots of Equations Arithmetically,” which was originally published in the *Philosophical Transactions* of 1694.

Over the years, I have had, with the exception of this book, all of Newton’s

printed publications. This book is truly uncommon.

Very good copy. Stamp on title of Stonyhurst College.

• Babson 199.

*His Four Pillars of the New Medicine;
Paracelsus' "Best-Known Work"*

77. **PARACELSUS.** *Das Büch Paragranum . . . Darinn die vier Columnae, als da ist, Philosophia, Astronomia, Alchimia, unnd Virtus, auff welche Theophrasti Medicin fundirt ist, tractirt werden. Item, Von Aderlassen, Schreppfens und Purgirens rechtem gebrauch.* Alles new publicirt, Durch Doctorem Adamum von Bodenstein. Title printed in red & black. 8 p.l., 175 leaves, 1 blank leaf. 8vo, attractive antique panelled calf (minor staining). Frankfurt: C. Egenolffs, 1565. \$9500.00

First separate edition of "his best-known work, for despite the usual confusion of detail the outline is simple, the style lively, and his basic teachings are put in a nutshell. Polemizing [sic] against ignorance and dogmatism, Paracelsus develops the fundamentals of the new medicine. He answers the renewed charge that he lacks diplomas with a question: 'What makes a doctor?' On four pillars, he says, rests the whole art of healing:

Philosophy (roughly corresponding to what today is called natural science).

Astronomy (in contrast to astrology, this includes characterology, psychosomatic dynamics, and psycho-climatology, or that indeterminate universe of knowledge which, for want of a better names, may be called anthropology, or psychology).

Alchemy (including biochemistry and pharmacology).

Virtue (the professional skill of the doctor, his experience and psychological ability to mobilize the patient's vital forces)."—Pachter, *Paracelsus*, p. 188.

Preliminary leaves with some relatively minor marginal repairs, otherwise a very good copy.

• Duveen, p. 451. Sudhoff 66.

Paracelsus the Surgeon

78. **PARACELSUS.** *Chirurgische Bücher und Schriften.* Title printed in red & black within an elaborate woodcut border, woodcut port. of Paracelsus on 2nd leaf, & printer's woodcut device on each sectional title. 6 p.l., 148, [2], 149-329, [2], 330-523, [3], 525-795, [39] pp., 1 blank leaf. Four parts & Appendix in one vol. Folio, cont. vellum over boards (some browning & foxing as is usual due to the quality of the paper).

Strasbourg: L. Zetzner, 1618. \$9500.00

A very nice copy of the second complete edition of Paracelsus' *Chirurgische Bücher* including hitherto unpublished texts (1st ed.: 1605). "With the exception of the *Grosse Wundarznei* this is a completely new work, printed from Huser's manuscript, and adds immensely to our knowledge of the author."—Sudhoff, p. 464—(in trans., describing the 1605 ed.). The Appendix on pp. 681-795 is largely alchemical.

"Paracelsus let light and air into the sickroom and exhibited distinct humanitarian and ethical traits in his attitude towards the patient, notably including the mentally sick. He recognised the healing power of nature especially in surgery where he restricted activity to the utmost. Consequently he adhered to the basic antiseptic principles of the schools of Hugo, Theodoric and Mondeville — without necessarily being conscious of predecessors in this field. Nor did he recommend the use of hot oil in wounds — a method then in common use, but possibly not known to him."—Pagel, *Paracelsus*, pp. 200-01.

Apart from the browning, a very good copy

♣ Sudhoff 302.

One of 50 Large-Paper Copies

79. [PARK, Thomas, collector]. *Bibliotheca Anglo-Poetica; or, a Descriptive Catalogue of a Rare and Rich Collection of Early English Poetry*: in the Possession of Longman, Hurst, Rees, Orme, and Brown. [Compiled by A.F. Griffiths]. Hand-colored frontis. (repeated on a plate facing p. 187) & various poets' ports. & handsome initials in the text. Title printed in red & black with woodcut vignette. viii, 481, [1] pp. Large 8vo, later green morocco richly gilt with panelled sides, compartments on spine gilt extra, narrow inside gilt dentelle borders, a.e.g. London: 1815.

\$1750.00

One of fifty large-paper copies of this luxuriously produced priced bookseller's catalogue, describing 956 items including some MSS. of early English poetry. "Though it is not stated in the catalogue, nearly the whole of the collection had been obtained by Longman from Thomas Hill (1760-1840), who had purchased the large poetical library of Thomas Park (1759-1834), the well-known historian of English poetry . . .

"Longman's speculation was not a profitable one. A few of the more expensive books were bought by Sykes and Heber . . . It may be noted that the larger portion of the books described in the *Bibliotheca Anglo-Poetica* (or *B.A.P.* as it was often called) were subsequently brought together again in the Britwell library."—De Ricci, pp. 91-92.

Park's library had been greatly augmented by Hill's purchases.

Fine and handsome copy. Armorial bookplate of Sir Charles E.H. Chadwyck

Healey. A pencilled note states that the binding is by Bumpus, but I think it is earlier.

*The Rare Bibliography of the
Middle Hill Press*

- 80. (PHILLIPPS, Sir T.).** *The Middle Hill Press. A Short Catalogue of Some of Sir Thomas Phillipps' Privately Printed Works.* [By Thomas Fitzroy Fenwick]. 12 pp. 4to, orig. self-wrappers (a little dusty), stitched as issued. London: Privately Printed by J. Davy & Sons, Dryden Press, 1886. \$350.00

First edition, privately printed, of this rare catalogue listing the publications which had proved so difficult to market in the great collector's own lifetime. Fenwick occasionally gives the number of copies printed and other bibliographical details. 124 items are listed.

Fine copy.

Ship-Wreck Rescues & Resuscitation

- 81. POPPE, Johann Heinrich Moritz & FOTHERGILL, Anthony.** [From the half-title]: *Anleitung vielerley Lebensgefahren, welchen die Menschen zu Lande und zu Wasser ausgesetzt sind, vorzubeugen, und sie aus den Unausweichlichen zu retten. Zusammengetragen aus zwey gekrönten Preisschriften.* Three engraved plates (one folding). 6 p.l., 179 pp.; 4 p.l., 115 pp. Two parts in one vol. 8vo, orig. blue paste-paper semi-stiff wrappers. Vienna: M.A. Schmidt, 1804. \$1650.00

First edition of this collection of two prize-winning essays on the rescue and resuscitation of ship-wrecked sailors.

Poppe's essay, which appears first, is entitled "Beantwortung der den 1. Jenner 1801 von einem ungenannten Mährischen Edelmann ausgegebenen Preisfragen: "Was für Maschinen und Erfindungen zur Rettung des menschlichen Lebens aus verschiedenen Gefahren sind bekannt?" Poppe (1776-1854), professor of technology at Tübingen, wrote a series of important works on technological subjects which greatly contributed to the popularization of mechanics, mathematics, physics, and technological methods in Germany.

Fothergill's *Essay on the Preservation of Shipwrecked Mariners*, which was previously published by the Humane Society of London in 1800, has been translated with the following title "Versuch Schiffbruchleidende Seefahrer zu erhalten als Beantwortung folgender, von der k. Humanitätsgesellschaft in London aufgeworfenen Preisfragen: "1. Welche sind die besten Mittel Seefahrer vor dem Schiffbruche zu bewahren. 2. das Schiff flott zu erhalten? 3. der

Schiffsmannschaft Hülfe zu leisten, zur Zeit eines heftigen Sturmes wenn Boote es nicht wagen können derselben beyzustehen?"

Fothergill (1737-1813), physician, devoted much of his energies to the fledgling Royal Humane Society, founded by William Hawes and Thomas Coggan in 1774. The society was concerned with the resuscitation of persons apparently dead from drowning.

The plates depict life boats and other rescue devices.

Fine copy, printed on thick paper.

"As Rare as It is Beautiful"—Duveen

82. PORTA, Giovanni Battista della. *De Distillatione Lib. IX. Quibus certa methodo, multiplicative; artificio, penitioribus naturae arcanis detectis, cuius liber mixti in propria elementa resolutio, perfectè docetur.* Finely engraved full-page port. of the author of verso of 5th preliminary leaf, woodcut arms on title, & 36 woodcuts in the text. 10 p.l., 154, [6] pp. 4to, cont. limp vellum. Rome: ex Typographia Reu. Camerae Apostolicae, 1608. \$16,500.00

First edition. "This book is as rare as it is beautiful. Ferguson, speaking of the reimpression (Strasburg 1609), says that 'the Roman edition is much the finer book'."—Duveen, p. 481. The many fine woodcuts of chemical furnaces and vessels include some very curious ones depicting pieces of apparatus likened to different animals.

"Porta published in 1608 at Rome a work on distillation, its methods, apparatus and applications, which is of interest as giving a more comprehensive view of the applications of distillation in the sixteenth century than is found in any other work of the period. Methods and apparatus for distillation had been described from very early times, by Zosimus, pseudo-Geber, Brunschwiyk, Biringuccio, Agricola and many others for particular applications...

"This treatise of Porta's...is divided into nine books, dealing successively with the kinds of distillation, the methods and apparatus for distillation in general, furnaces, retorts, condensers, etc....The seventh book deals with the distillation of strong waters, 'aquae validae,' he calls them. These are the corrosive mineral acids in the variety described in the German *Probierebüchlein*, and in the works of many writers following pseudo-Geber...This distillation of alcohol from wine, and the preparation of certain oils of animal origin are also given, musk, civet, beaver, scorpion, etc."—Stillman, *The Story of Early Chemistry*, pp. 350-51.

The handsome portrait of Porta is within a frame showing the objects and tools of his research in all branches of science.

A very fine copy.

• D.S.B., XI, pp. 95-98. Ferguson, II, pp. 215-16—(no copy in Young collection). Partington, II, pp. 24-25. Simon, *Bibliotheca Gastronomica*, 1213.

One of the Earliest Works on Lighting with Coal Gas

83. PRECHTL, Johann Joseph, Ritter von. *Anleitung zur zweckmässigsten Einrichtung der Apparate zur Beleuchtung mit Steinkohlen-Gas.* Two folding lithographed plates. xiv, 138 pp. 8vo, orig. semi-stiff blue wrappers, uncut. Vienna: C. Gerold, 1817. \$1500.00

First edition and a fine copy in original state of one of the earliest works on lighting with coal gas. Precht (1778-1854), director of the Polytechnic Institute in Vienna, was the first to introduce lighting by gas in Austria. This work contains an historical introduction, chemical analyses of coal gas, and descriptions of the methods of its manufacture as well as of the apparatus used.

The plates are incunables of lithography.

• Bolton, p. 751. Ferchl, p. 423. Poggendorff, II, 519-20.

With the Arms of Chancellor Louis Boucherat

84. RÉGIS, Pierre Sylvain. *Système de Philosophie, contenant la Logique, la Métaphysique, la Physique, et la Morale.* Finely engraved frontis. port. of the author in Vol. I., one folding engraved map, and numerous engraved or woodcut illus. in the text including vortices & anatomical depictions. Titles printed in red & black. 20 p.l., 480, [89] pp.; 7 p.l., 648, [48] pp., one leaf of errata; 8 p.l., 544, [43] pp., one leaf of errata. Three vols. Large 4to, cont. red morocco, panelled in gilt with gilt fleurons in each corner, with the arms of Chancellor Louis Boucherat (1616-1699), stamped in gilt in the center of each cover, spines richly gilt, a.e.g. Paris: d'Anisson, Posuel, & Rigaud, 1690. \$8500.00

First edition and a fine set bound in contemporary red morocco with the arms of Louis Boucherat (1616-99), Chancellor of France from 1685-99, succeeding Le Tellier and serving under Louis XIV.

Régis (1632--1707), was one of the principal expositors of Cartesian natural philosophy and this is his most important book on the subject. After finishing his classical studies in La Salvetat de Blanquefort, near Agen, Régis came to Paris, and studied under Rohault at the Sorbonne. Régis became a warm admirer and partisan of the philosophy of Descartes. He was then sent by Rohault to spread the doctrine, teaching with great success the principles of Cartesianism at Toulouse (1665), Aigues-Mortes, Montpellier (1671), and in Nicolas Lemery's laboratory in Paris (1680). He was elected a member of the Academy of Sciences in 1699.

The present work presents the principles of Cartesian philosophy in a systematic way.

Fine and handsome set. Bookplate of l'Abbé J.A. Gérard.

• Boucherat: Guigard, II, pp. 73-74.

The First Great Bibliography of Technology

85. ROSENTHAL, Gottfried Erich. *Litteratur der Technologie das ist: Verzeichniss der Bücher, Schriften und Abhandlungen, welche von den Künsten, den Manufakturen und Fabriken, der Handlung, den Handwerkern und sonstigen Nahrungszweigen, als auch von denen zum wissenschaftlichen Betriebe derselben erforderlichen Kenntnissen aus dem Naturreiche, der Mathematik, Physik und Chemie handeln.* 1 p.l., ii, 420 pp. Large 4to, cont. mottled half-sheep & paste-paper boards (lower cover a bit wormed, minor foxing), flat spine richly gilt, contrasting leather lettering pieces on spine. Berlin & Stettin: F. Nicolai, 1795. \$5500.00

First edition of the first great bibliography of technology in which the author lists about 20,000 books and articles. Rosenthal (1745-1814), a burgher and baker at Nordhausen, was a member of several important scientific societies and the author of many scientific works.

The book is arranged by subject and is particularly important in that Rosenthal has listed a very large number of contributions to journals, well-known and obscure. Many of these citations would be otherwise lost to historians of science and technology.

A very fine and attractive copy.

• Besterman 6020. Petzholdt, p. 727—"considerably complete" (in trans.). Poggendorff, II, 696-97.

With Four Striking Hand-Colored Plates

86. SACCO, Luigi. *Trattato di Vaccinazione con Osservazioni sul Giavardo e Vajuolo Pecorino.* Engraved frontis. port. of Jenner, engraved vignette on title, & four folding engraved plates, each finely hand-colored. 223, [2] pp. 4to, cont. marbled boards (extremities somewhat worn), uncut. Milan: Tipografia Mussi, 1809. \$1950.00

First edition. Sacco (1769-1836), was Italy's first and most enthusiastic supporter of Jennerian vaccination and the first vaccinator in Lombardy, where smallpox was eliminated within three years. After Jenner's own works, this is one of the most important early treatments of the subject and is the first major Italian treatise on vaccination. It had an enormous effect in swaying professional and public attitude in favor of the procedure.

The four hand-colored plates show vaccinia pustules.

Very good copy, entirely uncut.

A Fine Set

87. SAGE, Balthazar Georges. *Description Méthodique du Cabinet de l'École Royale des Mines.* 1 p.l., xvi, 487, xi pp. 8vo, cont. marbled calf, arms of the King in gilt on upper & lower covers, triple gilt fillet round sides, spine gilt, red morocco lettering piece on spine. Paris: l'Imprimerie Royale, 1784.

[with]:

—, *Supplément...* 1 p.l., 156 pp. 8vo, cont. marbled calf, matching the vol. above but without arms of the King on covers, spine decorated in matching style. Paris: l'Imprimerie Royale, 1787. \$5500.00

First editions and very fine copies in matching bindings. "An important and detailed catalogue of the magnificent collection of minerals gathered together by the French School of Mines during a period of twenty-five years. Sage, director of the school, here provides descriptions of the minerals that were brought from all parts of the world and gives their chemical composition, mineralogical characteristics, and other properties, where known. In addition, details are given of the minerals that are used for the production of metals and alloys. Rare."—Neville, II, p. 413 & 415.

• D.S.B., XII, pp. 63-69. Murray, *Museums. Their History and their Use*, III, p. 95. Schuh, *Mineralogy & Crystallography: A Bibliography, 1469 to 1920*, 4241.

Plastic Surgery

88. 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.

Alchemy

89. SCHWAERTZER, Sebaldus. *Chrysopoeia Schwaertzeriana. Das ist: Sebaldi Schwærtzers . . . Manuscripta, Von der Wahrhafften Bereitung des Philosophischen Steins . . . Nebst dem rechten zu solchen Manuscriptis gehörigen Schlüssel; Auch unterschiedlichen Abrissen der darzu dienlichen Ofen . . .* Six folding engraved plates. Title printed in red & black. 8 p.l., 186, [4] pp. 8vo, attractive antique calf-backed speckled boards, spine gilt, red morocco lettering piece on spine. Hamburg: S. Heil, 1718. \$2950.00

First edition and very rare; OCLC locates no copy in the U.S. Schwaertzer (d. 1598), was a German alchemist who performed many reputed transmutations of mercury into gold and silver. This is a notable work on the philosopher's stone, edited from a 16th-century manuscript. "The biographical notes of Sebald, or Sebalt, Schwartzter, or Schwertzer . . . are imperfect, and do not quite tally with one another. According to the older accounts he was a German by birth, who, at quite an early age, engaged in alchemical pursuits and travelled far and wide to meet other alchemists and gather knowledge and experience and make display of his art . . .

"The narrative, as given by Kunckel [the author of the *Laboratorium Chymicum*], states that in 1584 he [Schwaertzer] came from Italy, appeared at Dresden at the court of Saxony, and on St. Michael's day delivered to the Elector Augustus an account of transmutation in a manuscript written by himself, and requested permission to demonstrate his ability by an experiment. On 5 May 1585, the experiment was performed, when three marks of mercury were transmuted into gold, and the elector gave the Countess of Hallach, who was present, a portion (3 loth) of the gold. When the elector died he is said to have left in the treasury seventeen million rixdollars, and it was believed by Kunckel and others that they were the product of nine months' operations by Schwartzter, and to this sum the next Elector, Christian, added several millions in gold. At his death Duke Frederick William carried on the government as regent, and it was in consequence of his treatment of Schwartzter that the latter left Dresden and went to Prague, to the Emperor Rudolph."—Ferguson, II, p. 350—(& see the long biographical sketch of Schwaertzer).

Schwaertzer managed the Mansfeld copper-slate mines for the Elector at Dresden and the famous mines at Joachimsthal for Emperor Rudolph II at Prague.

Fine copy.

• Ferguson, II, pp. 349-51—(the copy in the Young coll. has only three plates). Neville, II, p. 446—Schwaertzer "was highly regarded by Johann Kunckel . . . the

book is very scarce." The Neville copy also has only three plates.

"His Greatest Single Medical Work"

90. STAHL, Georg Ernst. *Theoria Medica Vera. Physiologiam & Pathologiam, tanquam Doctrinae Medicae partes vere contemplativas, e Naturae & Artis veris Fundamentis, Intaminata ratione, & inconcussa experientia 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 Orphanotrophi, 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."

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 & paste-paper 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. \$9500.00

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 Theophrastus."—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.

"The Earliest Printed Catalogue of a Library Classified by Subjects"—Pollard & Ehrman

93. (THOU, Jacques Auguste de). *Catalogus Bibliothecae Thuanae à . . . Petro & Jacobo Puteanis ordine Alphabetico primùm distributus; tum à . . . Ismaele Bullialdo Secundùm Scientias & artes digestus, Denique*

editus à Josepho Quesnell . . . Parisiis, impensis Directionis . . . nunc Vero Hamburgi, apud Christian. Liebezeit, Bibliopol. Engraved frontis. Title printed in red & black. 52 (incl. frontis.), [4], 510 pp.; 632 pp. Small thick 8vo, cont. speckled sheep (foot of spine a little chipped, some browning), spine richly gilt. Hamburg: C. Liebezeit, 1704. \$3500.00

Second edition (1st ed.: Paris: 1679) of "the most celebrated and frequently consulted seventeenth-century private library catalogue. The library was largely formed by Jacques Auguste De Thou (1553-1617), the eminent French historian and statesman. Although the purpose of its publication was the sale of the De Thou library, which took place in 1681, its continued usefulness called for a reprint in 1704 [the present edition] . . . Most of the descriptions are in fact not by the brothers Dupuy but by the well-known scientist Ismael Boulliau (1605-1694), who arranged them according to a bibliographical system which, with slight variations by Prosper Marchand (1676-1756), and Gabriel Martin (1679-1761), was the one most frequently adopted in France and became known as the 'Système des Libraires de Paris'."—Grolier Club, *Bibliography*, 76—(1st ed.).

The "reprintings of catalogues of private libraries like those of the *Thuana* and the *Aprosiana* . . . are good evidence of the use of these catalogues as reference works. The books in all these collections have been scattered, and the reprinted catalogues could serve only bibliographers and scholars."—Taylor, *Book Catalogues*, p. 110—(who also notes on page 265 that Schelhorn preferred the 1704 edition).

Very nice copy and rare. Bookplate of A. de St. Ferriol and D. Henry.

♣ Pollard & Ehrman, pp. 208-09 & 211-12.

94. TIENE, Gaetano. *Expositio in libro de celo & mundo. Cum questioe Domini Egidii de materia celi nuperrime impressa & diligentissime Emendata.* Woodcut initials & woodcut publisher's device on final leaf. Double columns, Gothic type. 84 leaves. Folio, attractive antique reversed calf. [Venice: B. Locatellus for O. Scotus, 13 July 1502]. \$4500.00

Fourth edition (1st ed.: Padua, 1476). Gaetano da Thiene (1387-1465), of Vicenza, was a student of Paolo Nicoletti of Venice (fl. 1420). Gaetano was one of the chief exponents of Italian Averroism and wrote a number of commentaries on the scientific works of Aristotle.

"Books I and II of the *De caelo* treat of astronomical theories; III and IV, of the elements. Drawing upon theories advanced by his predecessors, Aristotle's theories in general may be summarized as representing the earth as fixed at the center of a spherical universe, with the spheres of the moon, Mercury, Venus, the sun, Mars, Jupiter, and Saturn in orbit around the earth, and beyond them the sphere of the fixed stars and the realm of the *primum movens* or force which,

every twenty-four hours, caused the planetary spheres to complete their revolutions, while each planet with an individual motion moved at times slightly retrograde."—Stillwell, *The Awakening Interest in Science during the First Century of Printing*, pp. 11-12.

Leaves 78-end contain the *De materia coeli* of Egidio Colonna (d. 1316), also known as Giles of Rome. A disciple of Thomas Aquinas while a student in Paris, Colonna was the first Augustinian appointed to teach in the University of Paris and his deep learning earned for him the title of *Doctor fundatissimus*. In 1295 he was appointed Archbishop of Bourges by Pope Boniface VIII. Colonna's *De materia coeli* is "especially noteworthy...[it] takes the position — against Aristotle, Thomas Aquinas, and the majority of contemporary scholars — that celestial matter is identical to that of the sublunary world."—*D.S.B.*, V, p. 403.

Fine copy.

✦ Adams G-1033—(under Gratia Dei).

The Rare First Edition

95. TROM(M)SDORFF, Johann Bartholomäus. *Handbuch der pharmaceutischen Waarenkunde zum Gebrauch für Aerzte, Apotheker und Droguisten*. xxvi, 624-1006, [xvii]-lxxvi pp. Thick 8vo, cont. half-sheep & marbled boards, spine gilt, contrasting leather lettering piece on spine (label a little flaked). Erfurt: Henning, 1799. \$1950.00

First edition and scarce; this was a very popular work with later editions in 1805, 1806, 1808, and 1822. Trommsdorff (1770-1837), was professor of chemistry and physics at Erfurt. "The great aim of his life was to improve the scientific position of pharmacy, and the value and success of his efforts were universally recognized...His library, laboratory and apparatus, all provided by himself, were superior to those of many public institutions."—Ferguson, II, p. 473.

Very nice copy. Pages xvii-xxvi contain a list of subscribers.

✦ *D.S.B.*, XIII, pp. 465-66. Hein & Schwarz, *Deutsche Apotheker-Biographie*, II, pp. 692-95. Hufbauer, *The Formation of the German Chemical Community (1720-1795)*, pp. 218-220. Partington, III, pp. 587-89.

96. WAGNER, C.F. *Anweisung zu Erhaltung der Dämme bei Stromergiessungen und Eisgängen*. Thirteen folding engraved plates (12 of which are finely hand-colored). xii, 195 pp., [1] pp. 8vo, cont. yellow glazed boards, flat spine. Grimma: C.F. Göschen-Beyer, 1827. \$2950.00

First edition of this very rare and attractively illustrated book on river management and dam construction. The author, "Königl. Sächs. Wasserbau-Director," describes how to construct dams which could withstand floods and

floating ice.

The plates in this book are unusually fine and twelve of them are beautifully handcolored. They depict techniques to secure river banks, construct dams, stabilize man-made objects in rivers, and some of the tools used.

Very fine copy. Small library stamp on verso of title with release stamp.

97. WIEBEKING, Carl Friedrich. *Praktische Anleitung zur Aufführung, Wiederherstellung und Erhaltung bequemer und das Commerz befördernder Landstrassen.* Three finely handcolored folding engraved plates & 5 folding printed tables. viii, 183, [1] pp. 8vo, cont. mottled calf (corners a bit worn, minor rubbing to joints), gilt fillets round sides, flat spine gilt. Vienna: J.B. Degen, 1804. \$3750.00

First edition of this rare book. Wiebeking (1762-1842), was a high government official charged with directing bridge and road construction in several states of Germany; he oversaw the construction of twenty-five major roads in Bavaria between 1805 and 1817. He was the author of a number of books on bridge- and road-building and other aspects of civil engineering. His writings were very influential. Wiebeking was renowned for his long-span laminated timber arch bridges and for his work as a hydraulic engineer.

The construction of roads in Germany during the 18th century was severely retarded by political dissension and the division of the country into many states, each too limited financially to execute a good road-building plan. This book is, on the one hand, a plea for a unified effort within Germany to build roads and, on the other hands, a civil engineering text. The author gives information on how to build various kinds of road beds, techniques of constructing roads on hillsides, and bridge-building. The fine plates depict many of the engineering problems discussed in the text.

Fine copy.

♣ Poggendorff, II, 1316–(not knowing this title).

Gas for Light & Heat

98. 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 entdeckten 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. \$2250.00

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.

99. WOLFF, Christian, Freiherr von. *Mathematisches Lexicon, darinnen die in allen Theilen der Mathematick üblichen Kunst-Wörter erkläret, und zur Historie der Mathematischen Wissenschaften 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.

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 Bibliography, 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 Bibliography, 1469 to 1920* (in progress)—"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."