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Catalogue 194

Proofs

Science, Medicine, Natural History,

& Bibliography

Selective Subject Index on Following Pages

Selective Subject Index

Acoustics: 23, 57, 99 Aeronautics: 46 Agriculture: 70, 77 Alchemy: 39, 88, 96 Americana: 84 Anatomy: 31 Archeology: 65 Architecture: 15, 20, 99 Art: 9, 10, 91, 93 Artillery: 82 Astronomy: 1, 2, 31, 85, 99 Auction Catalogues: 5-13 Balneology: 43, 50, 53 Bibliography: 4-13, 17, 22, 25, 27, 28, 32, 34, 35, 38, 49, 54, 60, 61, 69, 71, 75-77, 90, 93-95, 100 **Biography: 86** Biology: 56, 99 Bookbinding: 54 Botany: 4, 19, 31, 33, 42, 48, 56, 64 Bridges: 78, 86 Calculus: 15, 26, 92 Canals: 14, 15, 86 Catalogues: 17, 25, 28, 38, 49, 69, 90 Ceramics: 41, 91 Chemistry: 19, 21, 29, 31-33, 36, 39-43, 46, 47, 50, 51, 57, 63, 67-69, 73, 74, 81, 87-89, 91, 93, 96 Coins & Medals: 16 Color Theory: 99 Computers: 80 Dibner items: 45 Dictionaries: 68 Dietetics: 53 Dyeing & Bleaching: 32, 41, 51, 63, 91, 93 Early Printed Books (before 1601): 3, 19, 39, 43, 45, 52, 64, 72, 88, 93 Economics: 16, 24, 91 Electricity & Magnetism: 2, 66 Engineering: 14, 1544, 55, 78, 86, 98 Entomology: 63

3

Epidemics & Plagues: 30 Galileo: 85 Gastronomy: 41, 53 Geography: 99 Geology: 3, 4, 57, 62, 97 Geometry: 66, 92 Glass: 41, 91 Graphic Arts: 93 Hernia: 94 History: 22, 31, 65, 95, 99 Hoover items: 3, 91, 96, 97 Horblit items: 3 Horology: 80 Hospitals: 47 Hydraulics: 14, 15, 21, 44, 52, 55, 98, 99 Instruments: 1, 10, 37, 80, 85 Library Catalogues: 25, 38, 90 Machines: 10, 20, 37, 52, 55, 80, 84, 86 Mathematics: 26, 31, 70, 80, 82, 85, 92 Mechanics: 2, 15, 44, 52, 66, 78, 79, 83-86, 92, 99 Medicine: 19, 30, 39, 42, 43, 45, 47, 50, 53, 56, 64, 69, 72, 85, 87, 89, 94 Metallurgy: 16, 36, 81, 91, 96 Meteorology: 57 Microscopy: 10 Military History: 46 Mineralogy: 3, 10, 33, 89, 97 Mining: 89 Museums & Cabinets: 9, 10 Music: 23, 57, 99 Natural History: 3, 4, 10, 19, 33, 48, 56, 62, 85, 97, 99 Newtoniana: 82, 83 Numismatics: 16 Nutrition: 53 Oceanography: 63, 99 Ophthalmology: Optics: 2, 18, 99 Paleontology:3, 10, 57 Paper: 54 Pediatrics: 45 Perspective: 20

Pharmacology: 19, 42, 50, 64, 89 Philosophy: 72 Photography:91 Physics: 2, 18, 21, 23, 31, 33, 44, 66, 78, 79, 82, 83, 86, 86, 92, 99 Physiology: 99 Printing & the Mind of Man items: 23 Psychiatry & Psychology: 72 Statistics: 26 Surgery: 45, 94 Surveying: 70 Technology: 37, 41, 51, 78, 81, 84, 86, 91 Transport: 15 Trigonometry: 26 Weights & Measures: 16 Wine & Beer: 19, 53, 91 Women: 87

Catalogue Begins on Following Page

Catalogue 194

1. ADAMS, George, Senior. A Treatise describing the Construction, and Explaining the Use, of New Celestial and Terrestrial Globes. Designed to illustrate, in the most Easy and Natural Manner, the Phoenomena of the Earth and Heavens, and to shew the Correspondence of the Two Spheres. With a great Variety of Astronomical and Geographical Problems. Fourth Edition, in which a Comprehensive View of the Solar System is given; and the Use of the Globes is farther shewn in the Explanation of Spherical Triangles. 14 folding engraved plates. xxviii, 345, 14 pp. 8vo, cont. mottled half-calf & marbled boards, flat spine gilt, red morocco lettering piece on spine. London: Printed for and Sold by the Author, 1777. \$1750.00

Fourth edition, revised with important additions. About 1756 George Adams, Senior (d. 1772), "was appointed mathematical instrument maker to the prince of Wales (the future George III). New forms of instrument dating from this period include a trunnion-mounted microscope and an architectonic sector. Following the death of George II in 1760, Adams became mathematical instrument maker to George III, which, although unsalaried, was the most prestigious appointment available in this field. Many of the extant instruments in the King George III collection at the London Science Museum are from his workshop. In mid-1766 he launched new 18 in. and 12 in. globes, with a *Treatise* [the present work] describing their construction and use. The dedication to the king was contributed by Dr Samuel Johnson. The unusual form of mounting and relatively high price of Adams's globes drew scathing comments from Benjamin Martin, proprietor of the long-established Senex's globes, but they proved popular and many examples survive."–ODNB.

The final 14-pages contain "A Catalogue of Mathematical, Philosophical, and Practical Instruments, Made under the Inspection and Direction of George Adams."

Fine and attractive copy.

A Lovely Set

2. ADAMS, George, the younger. Lectures on Natural and Experimental Philosophy, considered in it's present State of Improvement. Describing in a familiar and easy manner, the principal Phenomena of Nature... Engraved frontis. & 39 folding engraved plates. xlviii, 548 pp.; vii, 561 pp., 1 leaf; vii, 579 pp.; viii, 576 pp.; 43, [1] pp. Five vols. 8vo, cont. polished calf (lower cover of Vol. II with a small gouge), flat spines gilt, blue leather lettering pieces on spines. London: sold by the Author, 1794. \$3750.00

First edition and an absolutely lovely set in fine and fresh condition; complete sets in matching bindings are decidedly uncommon. Adams (1750-95), mathematical instrument maker to George III, continued the famous business of manufacturing scientific instruments which his father established. Between 1785 and 1792 he supplied numerous instruments to Martinus van Marum for Teyler's Foundation at Haarlem in the Netherlands, most of which survive, and other continental institutions including the University of Coimbra, in Portugal.

This is the author's largest work and contains long sections on heat, air pressure, optics, electricity and magnetism, mechanics, and celestial mechanics. The attractive plates depict instruments and experiments.

Engraved armorial bookplate of Benjamin Haworth in each volume.

Poggendorff, I, 10.

"The First Handbook of Modern Systematic Mineralogy"–Horblit

3. AGRICOLA, Georgius. De Ortu & Causis Subterraneorum Lib. V. De Natura eorum quae effluunt ex terra Lib. IIII. De Natura fossilium Lib. X. De Veteribus & Novis Metallis Lib. II. Bermannus, sive De re metallica Dialogus. Interpretatio Germanica vocum rei metallicae, addito Indice foecundissimo. Woodcut printer's device on title, repeated on verso of last leaf, & a fullpage woodcut illus. on p. 146. 487, [52] pp. Folio, 18th-cent. red morocco, triple gilt fillet round sides, spine finely gilt, a.e.g. Basel: Froben, 1546. \$30,000.00

First edition, and a very handsome copy in 18th-century red morocco, of "the first handbook of modern systematic mineralogy."–Horblit 2a. This volume is comprised "of *De Ortu et Causis Subterraneorum*, in five 'books,' the first work on physical geology; *De Natura Eorum quae Effluunt ex Terra*, in four 'books,' on subterranean waters and gases; *De Natura Fossilium*, in ten 'books,' the first systematic mineralogy; *De Veteribus et Novis Metallis*, in two 'books,' devoted largely to the history of metals and topographical mineralogy; a new edition of *Bermannus* was included; and finally *Rerum Metallicarum Interpretatio*, a glossary of Latin and German mineralogical and metallurgical terms…No appreciation of Agricola's contribution to science can be gained without a study of *De Ortu et Causis* and *De Natura Fossilium*, for while *De Re Metallica* is of much more general interest, it contains but incidental reference to Geology and Mineralogy."–Hoover.

Very fine copy in fresh crisp condition, attractively bound. Preserved in a box. ル Duveen, pp. 5-6. Hoover 14. See Partington, II, pp. 44-45 for a detailed account. See also *Printing & the Mind of Man* 79.

4. (ARDUINO, Giovanni & Pietro). Indice degli Scritti stati pubblicati fino a luglio dell' Anno 1785 del. Sig. Giovanni Arduini [& Pietro Arduini]. 24 pp. Small 8vo, modern marbled wrappers (some dampstaining). N.p.: n.d. [but probably 1785]. \$500.00

First edition, and extremely rare, of the earliest bibliography of the writings of Giovanni Arduino (1714-95), a founder of geology, and his brother Pietro (1728-1805), a botanist who was appointed to the first chair of agriculture at the University of Padua.

Very good copy.

≈ *D.S.B.*, I, pp. 233-34.

One of the Most Distinguished Collectors of His Time

5. (AUCTION CATALOGUE: BROCHARD, Michel). Museum Selectum, sive Catalogus Librorum viri clariss. Michaelis Brochard, cum Indice Auctorum Alphabetico. Woodcut printer's device on title. xvi, 325, [42] pp. 8vo, cont. mottled calf (ends of spine a bit chipped, three corners a trifle worn), spine richly gilt, red morocco lettering piece on spine (label a little chipped). Paris: G. Martin, 1729. \$2750.00

Michel Brochard (d. 1728 or 1729), philologist and professor of the humanities at the Collège Mazarin, was one of the most distinguished collectors of his time. He also assisted Cisternay Du Fay in the formation of his outstanding collection. This is one of the twenty-two catalogues for which Gabriel Martin provided an index. 3034 lots and priced throughout in a contemporary hand.

In Brochard's preface to this catalogue, Martin expressly states that the collector directed in his will that it should be printed, without any change, from his own autograph MS., including his own bibliographical system; Martin only numbered the lots and compiled the index.

"The best older classified catalogues often have an index of authors and thus show the dealer's desire to make them permanently useful...According to the preface of the Brochard catalogue (1729), the owner had given testamentary instructions requiring the auctioneer to prepare a catalogue for reference use. He retained Brochard's classification and has added only an index of authors."–Taylor, *Book Catalogues*, p. 14.

Very good copy. On the final leaf there is a list of seventeen lots and their titles which were not offered for sale, as they had been left by Brochard to his heirs. 18th-century armorial bookplate "Ex Musoeo E.P. Le Tors de Chessimont." This was Edme Pierre Le Tors, director of the gunpowder factory at Essonne. He conducted a series of experiments with Lavoisier and Berthollet on gunpowder and accidentally blew himself up on 27 October 1788 in front of the two other scientists.

Bléchet, p. 81 & p. 39–"Le philologue Michel Brochard possède une belle collection de poète français, qui se sont vendus à un prix élevé." Grolier Club, *Printed Catalogues of French Book Auctions*... 1643-1830, 33. Peignot, p. 85. Pollard & Ehrman no. 271.

With Prices & Buyers' Names

6. (AUCTION CATALOGUE: [CHÂTEAUGIRON, René Charles Hippolyte le Prestre de Lézonnet, Marquis de]). Catalogue des Livres la plupart rares et précieux, et tous de la plus belle condition, faisant partie de la Bibliothèque de M. le Marquis de Ch***. Dont la Vente se fera le Lundi 2 Avril 1827, et jours suivans... 1 p.l., iv, 360 pp. 8vo, attractive antique diced calf & marbled boards (title a little defective at foot towards gutter), spine nicely gilt. Paris: J.S. Merlin, 1827. \$2750.00

The very rare sale catalogue of the library of Châteaugiron (1774-1848), a founder-member of the Société des Bibliophiles françois. After a short military career he entered the French diplomatic service. His library was considered to be one of the most beautiful in Paris on account of the choice of copies and the elegance and richness of the bindings. According to the Preface many were bound by the two Bozérians, Simier, and the two Thouvenins. Châteaugiron owned some fine early illuminated manuscripts and a wonderful collection of auction catalogues (lots 2579-2670).

2754 lots. The sale realized the then considerable sum of 62,596 frs. Priced throughout in a contemporary hand. Buyers' names and some bibliographical notes, in red ink, in a slightly later hand.

Very good copy. Lacks the half-title. OCLC locates no copy in America.

Gustave Brunet, Dictionnaire de Bibliologie Catholique, col. 430–"Une des belles bibliothèques vendues avant 1830." Grolier Club, Printed Catalogues of French Book Auctions... 1643-1830, 593.

7. (AUCTION CATALOGUE: DE BURE FAMILY). *Catalogue des Livres rares et précieux, Manuscrits et Imprimés, de la Bibliothèque de feu M. J.J. De Bure...*dont la vente aura lieu le jeudi 1er décembre 1853, et jours suivants... xii, 306 pp., 1 leaf; 16 pp. 8vo, attractive modern marbled boards, red morocco lettering piece on spine. Paris: L. Potier, 1853.

\$400.00

The scarce sale catalogue of the private library formed by several generations of the De Bure family of booksellers and auctioneers. The sale was occasioned by the death of Jean Jacques De Bure in 1853. This catalogue consists of 1853 lots. Later that month there was another sale of the De Bure family MSS. The catalogue of that sale is very rare.

"Ce cabinet se distinguait et par un grand nombre de belles et excellentes reliures anciennes en *maroquin*..."–Brunet, II, 555.

Fine copy with the separately issued price-list bound-in at end. Blogie col. 76.

8. (AUCTION CATALOGUES: GANCIA, G.). Catalogue des Livres rares et précieux provenant de la Collection de M. G.G.... de Br...... [G. Gancia of Brighton]. xii, 161 pp., 1 leaf with schedule of sale. 8vo, cont. green calfbacked marbled boards, flat spine nicely gilt, uncut. Paris: L. Potier, 1860.

[bound with]:

(LEBER, J.M.C.). Catalogue des Livres Imprimés, Manuscrits, Lettres autographes, Dessins et Estampes, provenant de la Bibliothèque de M. C. Leber...la vente aura lieu le samedi 3 novembre 1860 & jours suivants... ix, [1], 117 pp., 1 leaf with schedule of sale. 8vo. Paris: L. Potier, 1860.

[bound with]:

(SAUVAGEOT, C.). Catalogue des Livres, Manuscrits et Imprimés, composant la Bibliothèque de M. Charles Sauvageot...avec une Notice biographique par M. Le Roux de Lincy. xxxi, 175 pp. 8vo. Paris: L. Potier, 1860.

\$1950.00

An attractively bound *sammelband* of three noteworthy Parisian sales in 1860. I. Gancia was the greatest dealer in England specializing in French books; Henry Huth was one of his most important clients. Arriving at retirement age, Gancia began to consign his inventory to the leading auction houses of London and Paris for nearly twenty years. 1026 lots.

II. This is the second collection of Jean Michel Constant Leber (1780-1859); the first was donated to the Bibliothèque Municipale of Rouen in 1838. While not at large as his first library, the present collection — 542 lots of books, 90 lots of prints (containing about 2000 prints), and 9 lots of objets d'art — was an important one, rich in books on the arts and in MSS. on the history of France.

III. Sauvageot (1781-1860), was a remarkable and varied man: first violinist in the Paris Opera Orchestra, customs clerk, and collector of art objects, books, and manuscripts. He had a reputation for finding wonderful items and paying very little for them. 1691 lots including important illuminated MSS.

Fine copies.

🍽 II. Brunet, III, 900.

9. (AUCTION CATALOGUE: HECQUET, Robert, expert). *Catalogue d'Estampes, des meilleurs Maîtres d'Italie, de Flandres, de France, et Toutes les Écoles célèbres*. Dont la Vente se fera le 28 Fêvrier 1752. sur le Quay de l'École, dans une Maison à porte-cochère, à côté de la rue des Poulies. 2 p.l., 84 pp. Small 8vo, attractive antique calf-backed speckled boards, spine gilt, red morocco lettering piece on spine. Paris: Duchesne, 1752. \$1250.00

A rare auction catalogue of prints; according to a note in the copy at the BN, one of the consignors was "Chubéré." Hecquet (1693-1775), was an engraver best

known for his illustrations in *Les Travaux d'Hercule*. He also wrote several scholarly books on engraving. In order to supplement his income, he organized the present sale, coming from a variety of consignors, and describing 610 lots of prints. Priced throughout in a contemporary hand.

Fine copy.

10. (AUCTION CATALOGUE: JOLY DE FLEURY, Jean Omer).

Catalogue des Collections de Dessins et Estampes, d'Histoire naturelle, de Coquilles et Machines de Monsieur l'Abbé de Fleury, Chanoine de l'Eglise de Paris, dont la Vente commencera le 4 Mars 1756. vi, [7]-63 pp. Small 8vo, attractive antique calf-backed speckled boards, spine gilt, red morocco lettering piece on spine. Paris: G. Martin & P.G. Simon, 1756.

\$1350.00

The very rare sale catalogue of the art, natural history, and scientific instrument collections formed by Abbé Jean Omer Joly de Fleury (1700-55). His important book collection was sold immediately afterwards, also by Gabriel Martin. Joly de Fleury came from a prominent and rich noble family; he wrote a series of notable religious works.

The catalogue consists of about 150 large portefeuilles of prints and drawings; about 150 lots of natural history specimens, primarily shells with some minerals, fossils, and jewels; and 46 lots of scientific machines, including instruments dealing with mathematics, physics, electricity, and hydraulics. There are also numerous microscopes and telescopes.

According to Dezallier d'Argenville, Joly's natural history collection was "famous" and illustrates some of his specimens.

Fine copy, priced throughout in a neat contemporary hand with some additional interesting notes.

✤ N.B.G., Vol. 26, col. 861. Wilson, The History of Mineral Collecting 1530-1799, p. 177.

11. (AUCTION CATALOGUE: MOUCHARD, François). Notice des Principaux Articles des Livres de la Bibliotheque de feu M. Mouchard, Receveur général des Finances; dont la Vente se fera en sa maison...le Mercredi 12 Février 1783 & jours suivans... 2 p.l., 82 (i.e., 83), [1] pp. 8vo, attractive antique speckled calf-backed specked boards, spine gilt, red morocco lettering piece on spine. Paris: De Bure, fils aîné, 1783. \$2500.00

The very rare sale catalogue — OCLC locates no copy in the U.S. — of the library of Mouchard (d. ca. 1783), former deputy of La Rochelle to the Conseil

Royal de Commerce. We learn from Debure's "Avertissement" that the sale was prepared in great haste and is not catalogued to his usual standards. And, indeed, the catalogue consists of just 63 lots, each with a large quantity of books, ranging from 33 to 300 volumes. I estimate the library totaled about 2000 volumes, including many notable natural history books.

Fine copy, priced throughout in a contemporary hand.

✤ Grolier Club, Printed Catalogues of French Book Auctions...1643-1830, 305. Guigard, II, p. 378.

 (AUCTION CATALOGUE: ROOMAN, Gilles Jean). Catalogue des Livres de la Bibliothéque de feu Monsieur G.J. Rooman, Conseiller ordinaire au Conseil de S. M. l'Empereur & Roi ordonné en Flandre, &c. &c. Dont la Vente se fera dans la maison mortuaire...à Gand...le 9 mai 1791 & jours suivans...par P.F. de Goesin. Two parts in one vol. 2 p.l., xiv, [2], 307, [1], 94, [2] pp. 8vo, orig. blue wrappers (very minor & mostly marginal worming). Ghent: P.F. de Goesin, 1791.

The rare auction catalogue of the library of Councillor Gilles Jean Rooman, a high government official. Over a sixty-year period, he formed a large and fine collection of books. We learn from the "Avertissement" that Rooman did not collect the traditional high spots (illuminated MSS., incunabula, and other monuments of printing) but the best editions of books necessary for his work and intellectual interests. In reading through the catalogue, we can see that Rooman had broad intellectual tastes, with strong collections of law, science, and, above all, history.

3128 lots of books, 73 lots of coins and medals, and several scientific instruments. A reprint, apparently illegible, was published last year.

Very good copy.

≈ Blogie, I, col. 38.

"One of the Most Magnificent Collections Ever Brought to the Hammer"–Horne

13. (AUCTION CATALOGUE: STANLEY, Thomas). *Bibliotheca Stanleiana. A Splendid Selection of Rare and Fine Books, from the Distinguished Library of Colonel Stanley. The Selection contains all his rare Italian and Spanish Poetry, Novels and Romances; an extraordinary Collection of Voyages and Travels,...all the old Chronicles...Splendid Books of Natural History...*the Books will be sold by Auction by R.H. Evans...on Friday the 30th of April, and Seven Following Days. 3 p.l., 71, [1] pp. 8vo, attractive antique half-diced russia & marbled boards, spine gilt, outer & lower edges

uncut. London: 1813.

\$1850.00

Thomas Stanley (1749-1818), "was a book-lover possessing more knowledge of the contents of his library than many of those who were his contemporaries and juniors. It is refreshing to read the notes in the catalogue of his sale; evidently written by himself, when one has become tired of seeing over and over again the stereotyped inanities of most auction-catalogues. Colonel Stanley lived at a time when Italian literature was in vogue; Don Bowle was an elder contemporary whose example led Mr. Croft and Colonel Stanley to make acquaintance with Castilian books. Many works in the languages of the two peninsulas gave a certain distinction to the small but choice library of Colonel Stanley."–Quaritch, *Dictionary*, p. 271.

This was one of the fine libraries which came onto the market as a result of the bibliomania which was so evident at the Roxburghe sale in 1812. Stanley's library made the very large sum of 8232 pounds. 1136 lots, ruled in red and priced throughout with buyers' names. Heber was a major purchaser at this sale. The first edition of both volumes of Don Quixote made 42 pounds and was purchased by the Duke of Devonshire.

Fine copy.

Gustave Brunet, Dictionnaire de Bibliologie Catholique, cols. 584-85. De Ricci, p. 88. Horne, p. 674.

14. (BELGIAN HYDRAULICS). *Ministère des Travaux Publics. Inondations de l'Escaut et de la Lys. Rapport de la Commission instituée à l'effet de rechercher et de présenter au Départment des Travaux Public les mesures qu'il conviendrait de prendre, pour remédier aux Inondations extraordinaires des rives de l'Escaut et de ses affluents.* Eleven lithographed folding or doublepage plates (lettered E1, L-T & V, all but one finely hand-colored) and one double-page printed table (lettered U). 1 p.l., 142 pp. Small folio, *cont. fine red morocco, sides panelled in gilt, large gilt arabesque device in center of covers, a.e.g.* N.p.: n.d. (but probably Ghent: 1844).

\$2500.00

First edition and very rare with no copy in OCLC. Following a series of devastating floods, the Belgian government decided to attempt to control the Escaut (in Flemish: Schelde) River which begins in France and flows through or near a series of Belgian cities including Cambrai, Valenciennes, Tournai, Ghent, and Antwerp.

This handsome work describes the Escaut River and its main tributary, the Lys, in very great detail and makes a series of proposals regarding where to construct embankments, dams, and other water controlling structures. The chief engineers were Vifquin and Wolters. The handsomely hand-colored plates depict the river

13

as it flows through a series of towns with the connecting canals, rivers, and streams.

Fine copy.

A Classic of Engineering

15. BÉLIDOR, Bernard Forest de. Architecture Hydraulique, ou l'Art de conduire, d'elever, et de menager les Eaux pour les differens besoins de la Vie. Three engraved frontis. (one is a port. of the author), 219 folding engraved plates, & many fine engraved headpieces. Titles printed in red & black. Four vols. Large 4to, cont. calf (heads of spines a little worn), spines gilt, contrasting leather lettering pieces on spines. Paris: C.A. Jombert, 1737-39-50-53. \$5750.00

First edition of the most widely used and influential engineering text of the 18th and early 19th centuries. It is "one of the earliest scientific books in the field of engineering. Concentrating on civil construction he considers transportation, shipbuilding, waterways and water supply, ornamental fountains, windmills and pumps, epitomizing their state on the eve of the Industrial Revolution."–Roberts & Trent, *Bibliotheca Mechanica*, p. 30.

This work "proved to be invaluable to architects, builders, and engineers. [It amounted] to rationalized engineering handbooks in which the man in charge of a construction might look up model specifications for a foundation or a cornice, a pediment or an arch; fine diagrams he could follow or adapt; and consult job analyses and work plans for dividing and directing the labor."–*D.S.B.*, I, p. 582.

This was the first work of its kind to make practical use of the integral calculus. Attractive set. Bookplate and stamp on verso of each title of the "Bibliotheca Acad. Georgiae Augustae."

From the Library of Michel Chasles

16. BONNET, Auguste. Manuel monétaire et d'orfévrerie, ou, Nouveau Traité des Monnaies et des Calculs relatifs aux différentes Valeurs des Espèces, Vaisselles et Matières d'Or et d'Argent de France et étrangères, selon l'ancien et le nouveau Systême; Ouvrage utile aux Fonctionnaires de Monnaies, du Trésor public et des Bureaux de Garantie, aux Changeurs, Orfévres, Banquiers, et généralement à toutes les Personnes qui font le Commerce des Métaux précieux et qui les travaillent. viii, 501 pp. Large 4to, cont. sheep-backed paste-paper boards (joints & ends of spines very carefully repaired), flat spine gilt, red leather lettering piece on spine. Paris & Rouen: 1810. \$1500.00

First edition of this scarce work on methods of valuing different kinds of money, gold and silver plate, etc. The author, treasurer of the mint at Rouen, provides a history of money and of those who mint and regulate its use, methods of assaying metals, and techniques of valuing coins and plate.

The balance of the book describes the kinds of money used throughout the world — from France to the United States to Persia and beyond — describing each denomination, each coins' metallic content and weight, decoration, etc. There are extensive sections on weights and measures and rates of exchange.

Fine copy. From the library of the great scientist and book collector Michel Chasles (1793-1880), with his bookplate.

17. (BORROMEO, Anton Maria). Notizia de' Novellieri Italiani posseduti dal Conte Anton-Maria Borromeo, Gentiluomo Padovano con alcune Novelle inedite. 1 p.l., [iii]-xxi pp., 1 leaf, 243 pp. 8vo, orig. limp boards (small part of spine a little torn). Bassano: 1794. \$750.00

The first catalogue describing Count Borromeo's collection which is, according to Archer Taylor, the "foundation of the bibliography of the Italian novellieri."–*Book Catalogues*, p. 138. It was Borromeo's interest in the Italian novellieri which revived the taste for this literary genre amongst his contemporaries and caused many of the novels to be newly printed and imitated. After the death of Borromeo in 1813, Payne and Foss, the English booksellers, acquired the collection which was sold at auction in London in 1817. Fine copy.

Brunet, I, 1121. Peignot, p. 449–"fort curieuse."

The Father of Photometry

18. BOUGUER, Pierre. *Essai d'Optique, sur la Gradation de la Lumiere*. Three folding engraved plates. 12 p.l. (the first leaf is a blank), 164, [4] pp. 8vo, cont. calf (minor rubbing), spine richly gilt. Paris: C. Jombert, 1729. \$6500.00

First edition of the work which clearly established Bouguer as the discoverer of the first practical way of measuring light, as well as nearly all the photometric theory.

"Bouguer's achievement was to see that the eye could be used, not as a meter but as a null indicator, i.e., to establish the equality of brightness of two adjacent surfaces. He then made use of the law of inverse squares, first clearly set forth by Kepler. In his *Essai d'optique sur la gradation de la lumière* (1729), he showed how to compare lights in this way; he then went on to deal with the transmission of light through partly transparent substances. In the latter part of the *Essai*, Bouguer published the second of his great optical discoveries, often called Bouguer's law: In a medium of uniform transparency the light remaining in a collimated beam is an exponential function of the length of its path in the medium. This law was restated by J.H. Lambert in his *Photometria* (1760) and, perhaps because of the great rarity of copies of Bouguer's *Essai*, is sometimes unjustifiably referred to as Lambert's law."–D.S.B., II, p. 343.

Fine copy.

The "Grosse Distillierbuch"

19. BRUNSCHWIG, Hieronymus. *Das Buch zu Distilieren die zusamen gethonen Ding: Composita genant: durch die einzigen Ding uñ das buch Thesaurus pauperum genant, für die armen yetz von neüwem wider getruckt und von unzalbarn irrthumen gereynigt unnd gebessert...* Fine large woodcut on title, several other large woodcuts & about 125 woodcuts in the text. 8 p.l., 280 leaves. Small folio, cont. blindstamped calf-backed wooden boards (a few unimportant wormholes to first fifty leaves, occasional minor stain), orig. clasps & catches. Strasbourg: H. Grüniger, 1532.

\$15,000.00

Third edition (1st ed.: 1512) of the "Grosse Distillierbuch," the most extensive early handbook of pharmacology, which remained an authority throughout the 16th century. The special purpose of this book was to apply the methods of distillation with steam to separate the active principles of medicinal agents from the nonessential matter.

This is a richly illustrated work with more than 125 handsome woodcuts depicting distillation equipment, furnaces, and anatomical subjects. The text describes the distillation of spirits from wine, mead, and fermented fruit juices, and the distillation of plants, roots, and flowers. There are sections on aromatic and empyreumatic oils, distilled vinegar, and other products of distillation. There are particularly good descriptions of the technique of distillation. For each plant, Brunschwig has provided its synonyms, indications, and valuable parts.

Brunschwig (ca. 1450-ca. 1512), after receiving an education in surgery, traveled extensively through Alsace, Swabia, Bavaria, and the Rhineland as far as Cologne, practicing surgery and acquiring experience in the preparation of medicines, specifically in the technique of distillation. He finally settled in his native city of Strasbourg where he practiced medicine and became a writer on medical and pharmacological subjects.

A very good copy in a contemporary binding. Two leaves — P6 and Q1 —

carefully remargined at head and foot with several neat repairs (from another copy?).

≈ *D.S.B.*, II, pp. 546-47. Durling 749.

A Rare Work on Perspective

20. CAUS, Salomon de. *La Perspective, Avec la Raison des Ombres et Miroirs*. Finely engraved title & numerous fine engravings in the text (many full-page, one double-page). 5 p.l., 49 leaves, [16] leaves. Large folio, cont. vellum over boards (some dampstaining, mostly marginal, to about nine leaves, some light browning). London: Jan Norton, 1612 [with added engraved imprint beneath sill of the compartment: "Francfort ches la vefue de Hulsius"].

First edition, second issue (see below), of this rare perspective manual by the architect and engineer Salomon de Caus (d. 1626), a prominent theorist of perspective, who was renowned as an inventor of mechanical contrivances, utilitarian and entertaining. The book is of great interest for its material on the phenomenon of anamorphosis, a distorted projection or drawing of anything, which, when viewed from a particular point, or by reflection from a suitable mirror, appears regular and properly proportioned.

The work presents a large number of perspective problems, including intricate projections and optical illusions, drawings of shadows in perspective, and the mirroring of objects. "In the sum total of his work, this book takes its place as one chapter of a vast treatise on the wonders of the world, in which the harmony of sounds and shapes, the mechanics of vision and of hydraulic machines are presented on the same level. Although the author writes in the sober style of a technician, he is deeply aware of the poetry of his subjects."–Baltrušaitis, *Anamorphic Art*, p. 37.

Caus was born in the Dieppe region, but moved a great deal in Flemish and German circles in which anamorphoses seem to have been particularly in vogue. He was in the service of the Archduke Albert II of Austria (1605-10), then in England where he worked in the Richmond Gardens and for Henry, Prince of Wales, and finally with Frederick V, Elector of the Palatinate and King of Bohemia (1619). He spent the final years of his life in France. A cosmopolitan and intellectual with wide-ranging interests, he wrote on music, automata, on solar clocks and on Euclidean proportions.

This book appears to be the second book published in England to make use of folding or pop-up flaps in diagrams (the first being John Dee's Euclid of 1570).

Our book is an interesting example of shared printing: Richard Field printed the preliminaries, the letterpress of Chap. 10 of "Ombres" and all of "Miroirs" while Mommart in Brussels printed the rest. The first issue is dated 1611; our issue is dated a year later with a slightly altered imprint (see NSTC 4868.7 & 4869 for details).

A fine copy preserved in a black morocco-backed box. Several of the engravings have been slightly shaved at outer or lower margins.

№ Kemp, The Science of Art, pp. 112, 118, & 183.

Matthew Boulton's Copy

21. CAVALLO, Tiberius. *A Treatise on the Nature and Properties of Air, and other Permanently Elastic Fluids. To which is prefixed, an Introduction to Chymistry.* Three folding engraved plates of apparatus & a folding table. xii, 835, [9] pp. Large 4to, cont. sheep-backed marbled boards (some rubbing & minor wear to spine), spine gilt, red morocco lettering piece on spine. London: Printed for the Author, 1781. \$2500.00

First edition, Matthew Boulton's copy with the later bookplate. With this book, "Cavallo switched his attention to the physics of the atmosphere and to the constitution of 'permanently elastic fluids.' Again his strengths appeared in instrumentation — an improved air pump and a modified eudiometer — and in smoothing the way for others. This time his course of self-instruction...was a judicious examination of contemporary work, particularly Priestley's, presented from a nondogmatic phlogistic point of view. He always retained a lively interest in pneumatic physics and chemistry, whose applications to ballooning and to medicine became subjects of two later books."–*D.S.B.*, III, p. 153. Cavallo, while accepting the phlogiston theory, quotes Lavoisier's views as well.

In this work, Cavallo also describes extensions of the experiments of Ingen-Housz on the influence of light on the growth of plants.

Cavallo (1749-1809), the son of a Neapolitan physician, did all his scientific work in England and became a member of the Royal Society in 1779.

A very good copy with a most appropriate provenance of this work concerned with chemistry, hydrostatics, and pneumatics. Dedicated to Sir Joseph Banks. Ex Bibliotheca Mechanica.

Cole 236. Duveen, pp. 127-28. Partington, III, p. 300.

22. CELSIUS, Olof Olofsson. *Bibliothecae Upsaliensis Historia*. 2 p.l., 153, [1] pp. 8vo, cont. blue boards (extremities a trifle worn). Uppsala: Regiae Academiae Ups. impensis, 1745. \$400.00

First edition of this early history of the University Library at Uppsala, one of the most important libraries in Scandinavia, founded by Gustavus II in 1620 with the contents of the first Royal Library at Stockholm and the remains of various convent libraries.

The author has furnished descriptions of some of the library's outstanding MSS. including the celebrated *Codex Argenteus*.

Fine copy. This copy belonged to Anders Grape who was the chief librarian of the Uppsala University Library, 1928-46. Earlier bookplate of C.J. Källström.

"The Foundation of the Modern Science of Acoustics"

23. CHLADNI, **Ernst Florens Friedrich**. *Die Akustik*... Engraved vignette port. of the author on title & eleven plates. 2 p.l., [iii]-xxxii, 304 pp., 1 leaf, 305-310 pp. Large 4to, cont. boards (some wear & occasional foxing). Leipzig: Breitkopf & Härtel, 1802. \$4750.00

First edition. "Chladni, professor of physics in Breslau, was the first to reduce the general association between vibration and pitch to a tabular basis and thus to lay the foundation of the modern science of acoustics. His first results were reported in 'New Discoveries in the Theory of Sound', 1787, and were greatly enlarged in 'Acoustics', 1802. He spread sand on plates made of metal and glass, which were fixed in clamps. He then applied a violin bow to the edge of each plate and recorded the patterns produced thereby in the sand. These figures are still known by Chladni's name."–*Printing & the Mind of Man* 233b.

A good and large copy. In the collation given by *N.U.C.*, the vignette on the title-page is counted as plate XII. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, p. 70–"the consummation of Chladni's classical researches in the theory of sound...Timoshenko credits this work with arousing great interest in the theory of plates." Sparrow, Milestones of Science, 38.

Very Rare

24. COLLINS, John. *The Doctrine of Decimal Arithmetick, Simple Interest, &c. As also of Compound Interest and Annuities...formerly abridged for portability in a Letter Case...* and since his Death both made Publick by J.D. 4 p.l., 102 pp. Small 8vo, cont. speckled sheep over wooden boards (expertly rebacked, one corner a bit worn). London: R. Holt for N. Ponder, 1685. \$3750.00

First edition. This is an expansion of Collins's 1669 sheet entitled *Compendium for A Letter Case;* both are of very considerable rarity. According to *E.S.T.C.,* there is only one copy of the present work in the U.S. (DFo).

"This Book is a fit Companion for all Gentlemen, Merchants, Scriveners, and other Trades-men, that deal much in lending of Money upon Interest, Mortgages, buying of Estates either in Fee, Copy, or Lease, holding Annuities, Rent Charges, Forbearance of Money, Discompt, or any other way concerning Interest, &c."-from "The Epistle to the Reader."

Collins (1625-83), a fellow of the Royal Society, carried on an extensive correspondence with many of the finest scientists of his day including Newton, Borelli, Oldenburg, Huygens, Sluse, Leibniz, and Tschirnhausen.

Fine copy. With some interesting corrections to the text.

₩ *D.S.B.,* III, pp. 348-49.

"England's First Great Bibliophile"

25. CORPUS CHRISTI COLLEGE, CAMBRIDGE. *Catalogus Librorum Manuscriptorum quos Collegio Corporis Christi et B. Mariae Virginis in Academia Cantabrigiensi. Legavit...Matthaeus Parker, Archiepiscopus Cantuariensis*. Edited by James Nasmith. Engraved frontis. port. of Parker. 4 p.l., 429, [22] pp. Large 4to, cont. boards (rather well-rebacked in paper, preliminary leaves browned), uncut. Cambridge: J. Archdeacon for J. Woodyer et al., 1777. \$750.00

First edition of the catalogue of the 482 MSS. bequeathed to Corpus Christi College, Cambridge, by Matthew Parker (1504-75), "England's first great bibliophile...It is hardly conceivable that a man who played such a prominent part in the ecclesiastical affairs of the sixteenth century, should also have found time to publish a number of scholarly works and to collect a great library."–De Ricci, p. 15.

Very good copy. Sides rubbed.

"The First Complete Treatise on the Integral Calculus" with "Cotes's Rule"

26. COTES, Roger. *Harmonica Mensurarum, sive Analysis & Synthesis per Rationum & Angulorum Mensuras promotae: accedunt alia Opuscula Mathematica...*edidit et auxit Robertus Smith. One engraved plate & numerous woodcut diagrams in the text. 10 p.l., 249 pp.; 1 p.l., 125, [1] pp. Two parts in one vol. Large 4to, cont. speckled calf (head cap a bit chipped), triple gilt fillet round sides, spine gilt, red morocco lettering piece on spine. Cambridge: 1722. \$6500.00

First edition. "This most important book by Cotes was published posthumously by his friend and successor at Trinity College, Robert Smith. Professor Morgan calls it 'the earliest work in which decided progress was made in the application of logarithms and of the properties of the circle to the calculus of fluents.' It is also the first complete treatise on the integral calculus and first contains the well-known theorem in trigonometry known as the 'Cotes' theorem.' The second part has miscellaneous writings by Cotes, including 'De Methodo Differentiali Newtoniana,' 'De Descensu Gravium,' 'De Motum Pendulorum in Cycloide,' 'De Motu Projectilium,' etc."–Babson, *Supp.*, p. 29.

Of considerable additional interest is the first printing, on page 22, of "Cotes's Rule" which "can be (and has been) read as recommending a weighted mean, or even as an early appearance of the method of least squares."–Stigler, *The History of Statistics*, p. 16.

Very fine and large copy with half-title.

▶ *D.S.B.,* III, pp. 430-33.

27. DECKHERR, Johann. *De Scriptis adespotis, Pseudepigraphis, et Supposititiis, Conjecturae*. Woodcut vignette on title. 7 p.l., 195, [31] pp. 12mo, 18th cent. calf-backed boards (spine somewhat worn, some foxing), spine gilt, red morocco lettering piece on spine. N.p. [but Amsterdam]: 1681. \$350.00

Second edition, enlarged (1st ed.: 1678) of this rare supplement to Placcius' *Syntagma*, the first real dictionary of anonyma. and pseudonyma. Both the 1678 and 1681 editions are very rare; neither is in *N.U.C.* Deckherr's *Conjecturae* is the first collection of notes and additions to Placcius's *Syntagma*. "Deckherr arranged his books in fifteen chapters according to the various disciplines and cited some six hundred items. Since he did not arrange the items alphabetically, his book was not easy to use, but an index of authors was very helpful."–Taylor & Mosher, *The Bibliographical History of Anonyma and Pseudonyma*, p. 108. Appended are the corrections and additions by Poul Vinding, which appear in this edition for the first time.

Good copy. Old library stamp on title.

Presentation Set

28. (DEVONSHIRE, Dukes of). *Catalogue of the Library at Chatsworth.* [Compiled by James P. Lacaita]. 27 engraved vignette views of Chatsworth tipped-in. Four vols. Large 8vo, orig. green half-morocco & marbled boards, spines richly gilt, t.e.g. London: [Privately] Printed at the Chiswick Press, 1879. \$2500.00

One of 200 sets only on regular paper (of a total edition of 250 copies). This rare catalogue stands as the best record of what is still Britain's finest private library, rich in incunabula, the classics, MSS., English literature, etc. The compiler has provided a history of the house and library which serves as the Preface.

Fine set. This set has not been numbered. Tipped-in is a letter from Emma Cavendish, dated 3 January 1893, presenting this set to "Mr. Stanley."

№ De Ricci, pp. 33, 58, 72-74, & 78-81.

The Only Account of Digby's Chemical Experiments

29. DIGBY, **Sir Kenelm**. *Theatrum Chimicum*, *ofte geopende deure der chymische verborgentheden*... Engraved title, ten engraved plates (2 are folding & numbered "IX, No. 1" & "IX No. 2") & one unnumbered plate at p. 472. 8 p.l. (incl. engraved title), 490, [22], 170, [6] pp. Small 8vo, modern calf (fore-edge of engraved title slightly cropped, diminishing brown stain in lower corner of some 35 leaves barely touching any text, pale dampstain on a few leaves). Amsterdam: J. ten Hoorn, 1693.

\$750.00

First edition in Dutch of Digby's *A Choice Collection of Rare Chymical Secrets and Experiments in Philosophy* (1682), the only account of his chemical experiments, which were never published in his lifetime. This work "is the last of the compilations of recipes from Digby's papers made by his assistant Hartman...The compilation shows Digby to be a contributor to the development of modern chemistry by making alchemy more rational. Chemical operations are clearly shown; materials, quantities, step-by-step procedures, degrees of fire, etc., are described; and older alchemical terms are translated."–Norman, *Sir Kenelm Digby, F.R.S. A Bibliography*, 136.

Very good copy. Bookplate of Norman Travis.

✤ See Dobbs, "Studies in the Natural Philosophy of Sir Kenelm Digby," Ambix XVIII for a detailed analysis of Digby's experiments.

30. DROGART, G.P. *Dissertation sur le Typhus*. 31 pp. 4to, modern marbled wrappers. Paris: Didot jeune, 1814. \$325.00

First edition of this scarce dissertation on typhus. Drogart, a member of the Société de Médecine-Pratique, describes the nature of typhus, the course of the disease, and treatments. A number of interesting case histories are provided. Fine copy.

The First Printed History of the Royal Academy of Sciences of Paris

31. DUHAMEL, Jean Baptiste. *Regiae Scientiarum Academiae Historia, in qua praeter ipsius Academiae originem & progressus, variasque dissertationes & observationes per triginta quatuor annos factas, quam plurima experimenta & inventa, cum Physica, tum Mathematica in certum ordinem digeruntur. Secunda Editio priori longe auctior.* Two engraved plates (one folding) & woodcut diagrams in the text. 9 p.l., 615 pp. Large 4to, cont. calf (joints a bit rubbed), spine richly gilt, red morocco lettering piece on spine.

Paris: J.B. Delespine, 1701.

\$2250.00

Second edition, greatly enlarged, (1st ed.: 1698) of this indispensable source book for the history of French science in the second half of the 17th century. Duhamel (1624-1706), became the first secretary of the Paris Academy of Sciences upon its foundation in 1666. The first chapters deal with the foundation of the Academy. They are followed by year-by-year reports on the experiments and discoveries presented to the Academy by its members in the fields of astronomy, physics, chemistry, mathematics, anatomy, botany, etc. during the next thirty years.

A fresh copy. There was a Hamburg reprint of the first edition which appeared in 1700.

ኈ *D.S.B.*, IV, pp. 221-22.

32. (EDELSTEIN, Sidney M.). *Catalogue of the Sidney M. Edelstein Collection of the History of Chemistry, Dyeing and Technology*. Compiled by Moshe Ron. Plates. 182 pp. Small folio, orig. white cloth (soiled). Jerusalem: The Jewish National and University Library, 1981. \$50.00

This was Emil Offenbacher's copy. Dr. Edelstein was one of Emil's best clients and Emil is largely responsible for the riches described in this catalogue.

A Rare Scientific Journal

33. ERXLEBEN, Johann Christian Polykarp, ed. *Physikalische Bibliothek*. 16 parts in 4 vols. [complete]. 8vo, cont. half-sheep & speckled boards (some light & mostly marginal dampstaining in Vol. IV), spines gilt, contrasting leather lettering pieces on spines. Göttingen: 1775-75-77-79. \$2500.00

First edition of this rare scientific journal, edited by Erxleben (1744-77), professor of physics at the University of Göttingen. As a scientist, he conducted investigations on fixed air, gold purple, and the red color of alum from Brunswick. He also wrote standard introductions to natural history and chemistry, which enjoyed considerable success.

This short-lived journal contains articles on botany, chemistry, mineralogy, natural history, and physics. There are many extended book reviews of noteworthy contemporary scientific books from Germany, France, England, and Italy. The final part of Vol. IV contains a long biographical sketch of the recently deceased Erxleben by Abraham Gotthelf Kästner, the notable mathematician. Kästner also edited this final part.

Fine set.

* Kronick, Scientific and Technical Periodicals of the Seventeenth and Eighteenth

Centuries, 1419.

34. [FORMEY, Jean Henri Samuel]. Conseils pour former une Bibliothèque peu nombreuse mais Choisie...Suivie de l'Introduction générale à l'Étude des Sciences & Belles-Lettres par M. de la Martiniere. xx, 352 pp. 8vo, 19th cent. half-calf & marbled boards by "Petit, Succ. de Simier," spine nicely gilt, red & green leather lettering pieces on spine, t.e.g., others uncut. Berlin: Haude & Spener, 1756. \$500.00

This was one of the most successful of the catalogues of "best books" and it was quite popular during its day; the first edition appeared in 1746 and there were about five later editions within 18 years. Taylor, in his *Book Catalogues* (p. 148), cites other early examples including those by Mabillon, Morhof, and Dibdin.

Formey (1711-97), Prussian man of letters, was perpetual secretary of the Berlin Academy of Sciences.

Nice copy. Bookplate of Jules Pardonneau of Tours and Jacques Sejournet.

≈ Peignot, pp. 37-38–(1750 ed.). Petzholdt, p. 32.

35. FREYTAG, Friedrich Gotthilf. *Analecta Litteraria de Libris Rarioribus*. Engraved vignette on title. 4 p.l., 1138, [7] pp. Small thick 8vo, cont. sheep (ends of spine somewhat worn, binding a little wormed, minor browning due to the quality of the paper). Leipzig: Weidemann, 1750. \$350.00

First edition and only edition of this important and early book on rare books; it was a basic working tool of the 18th century scholar/book collector and still retains considerable interest. There were several such 18th century German bibliographical compilations of rare books and they all have the following characteristics: alphabetical lists with historical and critical comments; they almost always contain a prefatory discussion of the nature and causes of rarity in books; they are strong on Protestant theology and Greek and Latin classics; they contain a moderate quantity of historical and geographical writings; and, except for books in Italian, they have a rather small proportion of belles-lettres. Very good.

See Archer Taylor's Catalogues of Rare Books (1958). Petzholdt, p. 113.

36. GAY-LUSSAC, Joseph Louis. Instruction sur l'Essai des Matières d'Argent par la Voie humide. Publiée par la Commission des Monnais et Médailles. Six large folding engraved plates of apparatus. 88 pp. 4to, orig.

blue wrappers, uncut & largely unopened. Paris: l'Imprimerie Royale, 1832. \$950.00

First edition. With this work Gay-Lussac made a major contribution to chemical analysis. It contains a detailed description of his precipitation titration method for the quantitative determination of silver, which completely displaced the centuries old method of cupellation.

Very good copy.

✤ Cole 509. Neville I, p. 504–"One of the most important books published by Gay-Lussac." Darmstaedter, *Handbuch*, p. 386.

One of the Most Complete Books on Lathes; Richly Illustrated

37. GEISSLER, Johann Gottlieb. Der Drechsler oder praktischer Lehrbegrif der gemeinen und höhern Drehkunst, nach den besten ältern und neuern Schriften, durch Mittheilungen Deutscher Künstler und nach eignen Erfahrungen... 152 engraved plates (mostly folding). xvi, [4], 164 pp.; 4 p.l., 152 pp.; 4 p.l., 196 pp.; 4 p.l., 159 pp.; 3 p.l., 122 pp. Three vols. in five parts bound in one. Large thick 4to, early 19th cent. sheep-backed marbled boards (corners a little rounded), flat spine gilt. Leipzig: S.L. Crusius, 1795-96-1800-01-01. \$6500.00

First edition and very uncommon, especially with the third volume (in three parts), issued five years after the second. Geissler (b. 1753), a practical engineer at Zittau and a member of various scientific societies, wrote several interesting books on precision and scientific instruments. He also translated a series of notable technological books from English into German.

Machine tools are fundamental to industrial civilization and the first such machine tool available to engineers, as regards to both date and importance, was the lathe. The present book was the most extensive work on lathes published in Germany for many years. Geissler describes the numerous kinds of lathes designed for various purposes including lens grinding, making clocks, ornamental turning for fancy work in metal and wood, making accurately threaded screws (which is one of the most essential operations in the construction of instruments for the measurement of angles), polishing materials which have been lacquered or otherwise colored, etc. The author discusses the qualities and suitability of many kinds of woods for turning, the use of stains on these woods, various types of lacquers, etc.

The 152 plates are richly detailed, depicting all aspects of the numerous lathes, their parts, and the finished products.

Fine and clean copy.

№ Poggendorff, I, 869.

38. BIBLIOTHÈQUE PUBLIQUE ET UNIVERSITAIRE, GENEVA.

Catalogue de la Bibliothèque Publique de Genève. By Louis Vaucher. 2 p.l., xliv, 560 pp.; 2 p.l., 561-948, 133, [1] pp. Two vols. 8vo, cont. grey pastepaper boards (four lower corners bruised), cont. printed paper labels on spines. Geneva: 1834. \$2500.00

The earliest catalogue of the printed books of the public library of Geneva, which traces its origins to 1540. In 1779 Senebier published a catalogue of the MSS. The preliminary leaves of Vol. I contain an excellent history of the library, its collections, major donations, etc.

Fine set and rare. From the library of His Serene Highness Prince Fürstenberg at Donaueschingen with his library's ownership stamp on titles and final leaves.

"A Very Important Item"-Duveen

39. [GRATAROLI, Guglielmo], ed. *Verae Alchemiae Artis'que Metallicae, Citra Aenigmata, Doctrina, certus'que modus, scriptis tum novis tum veteribus nunc primùm & fideliter maiori ex parte editis, comprehensus: quorum elenchum à Praefatione reperies.* 8 p.l., 244, 299 pp. Folio, 18th–cent. calf (joints very expertly repaired, unimportant marginal worming), double gilt fillet round sides, spine nicely gilt, red morocco lettering piece on spine, a.e.g. Basel: H. Petri & P. Pernam, 1561. \$22,500.00

First edition of this very uncommon book. "One of the earliest collections of alchemical writers, containing 53 texts, a full list of which is given by Ferguson. It includes works by Geber, Roger Bacon, Arnaldus de Villanova, Albertus Magnus, Raymundus Lullius, Joa. de Rupescissa, Gugl. Gratarolo (the editor), and many others."–Duveen, p. 268.

"Gratarolo was a native of Bergamo, where he was born in 1516. He went through the customary training, and then turned his attention to medicine. Having acquired a liking for Protestantism he settled in Basel in 1555, and remained there till 1562, when he was summoned to Marburg as professor of medicine. He, however, remained only a year there, and returned to Basel, where he practised medicine and wrote several works."–Ferguson, I, p. 342.

A fine copy.

≈ Hirsch, II, p. 634.

Not by Boyle

40. G[REGG], H[ugh]. *Curiosities in Chymistry: being New Experiments and Observations concerning the Principles of Natural Bodies*. Written by a Person of Honour, and Published by his Operator, H.G. Title within double-ruled border. 1 p.l., 103 (i.e. 113), [3] pp. of ads. Small 8vo, cont.

mottled calf (small hole in leather on upper cover, single wormhole becoming a short track in lower margin of first 20 leaves & endpapers). \$4500.00 London: H.C. for S. Anson, 1691.

First edition and a lovely copy of an uncommon book on the market. From the wording of the title, Gregg (or Greg) clearly intended his work to be thought of as by Robert Boyle, but recent scholarship confirms Gregg as the author. Gregg was Boyle's longstanding amanuensis and assistant. "The work is entirely the work of Greg rather than Boyle, various of whose works are cited, and who is repeatedly referred to in the third person. At one point, the author refers to the ability of fire to penetrate glass 'as Mr Boyle has undeniably evinced by a great many Experiments', and it is interesting to speculate how far Greg may have drawn on the experience that he had acquired in Boyle's laboratory. His chief claim was the Helmontian one 'that Water is the only first Material Principle of Natural Bodies; and that all the other pretended Hydrostatical Principles are ultimate and reducible into mere Elementary Water', but he also invoked such subsidiary concepts as 'Seminal Ideas', a 'Universal Spirit' and the role of acidity."-Hunter & Davis, eds., The Works of Robert Boyle, Vol. I, pp. 104-05.

Fine copy.

> Fulton 354. Neville, I, p. 192-cataloguing the book under Boyle, notes: "The present text...is extremely important because it sets forth some of his theories of the composition of matter which he was unwilling to print even as hypotheses in works appearing under his own name...In nineteen propositions and numerous ingenious chemical experiments, he makes a good case for the elementary nature of water." The British Library Catalogue attributes this to Boyle.

GREN, Friedrich Albrecht Carl. Principles of Modern Chemistry, 41. Systematically Arranged...Translated from the German; with Notes and Additions, concerning later Discoveries, by the Translator, and some Necessary Tables. Seven engraved plates (one double-page). 1 p.l., xvii, [1], 448, 1 leaf, 6 leaves of explanatory text; 1 p.l., iv, [1], 498 pp. Two vols. 8vo, cont. tree calf (short crack at top of one joint, minor foxing), flat spines gilt with red & green morocco labels. London: T. Cadell & W. Davies, 1800. \$1350.00

First edition in English of Gren's Grundriss der Chemie with additions and notes by the translator (Dr. Gruber...). Although the author had his own eclectic theory of chemistry he has followed the antiphlogistic system in this work."-Cole 554. The text also describes glass- and ceramic-making techniques, dyeing, brewing, etc.

Gren (1760-98), founder of the Journal der Physik, Germany's most exciting

scientific journal, slowly adopted Lavoisier's theories, which helped prepare the way for the ultimate acceptance of the Frenchman's ideas in Germany.

Nice set.

№ D.S.B., V, pp. 531-33. Duveen, p. 268. Neville, I, p. 548. Partington, III, pp. 575-77.

With a "Pharmacopoeia Indica"

42. GRIMM, Herman Nicolas. *Compendium Medico-Chymicum, seu Accurata medendi Methodus, quae excellentissimis Medicamentis, tam Europae, quam Indiae Orientali proficuis, repleta, rariores Observationes, & curiosam optimorum Medicamentorum, in libelli hujus formulis contentorum, praeparationem exhibet, auctior & emendatior.* Finely engraved frontis. 7 p.l. (incl. frontis.), 475, [11] pp. 8vo, cont. vellum over boards. Augsburg: T. Göbel, 1684.

[bound with]:

HUENERWOLF, Jakob Augustin. Anatomia Paeoniae, in qua Natales et Qualitates Paeoniae, itemque Praeparationes et Medicamenta ex ea varia cum Virtutibus et Usu ad plurimos Humani Corporis affectus exhibentur. 1 p.l., 110, [8] pp. 8vo. Arnstadt: H. Meurer, 1680. \$8500.00

Two very interesting chemical/medical/pharmacological works. According to OCLC, no copy of the Grimm is found in American libraries.

I. Second edition, enlarged. The first edition was printed in Batavia and is of the greatest rarity. Grim(m) (1641-1711), the son of the physician to the Kings of Sweden, took his medical degree and then spent eight years in various parts of Sumatra as a physician. Upon returning to Sweden, he assumed his father's medical appointment. He wrote a number of books on chemistry, mineralogy, and pharmacology.

The present work is the result of his long stay in the East Indies. It is a collection of pharmacological recipes based on minerals and herbs found in the East Indies and in Europe. Hirsch describes Grimm's contributions to the knowledge of pharmacology as very "considerable."

The Pharmacopoeia Indica appears on pages 387-475.

II. First edition of this work on the medical uses of the peony plant. Extracts from the peony root have long been used in China, Japan, and the West to treat convulsions. Huenerwolf also describes how the peony can be used to enhance mental and liver function, inhibit blood clotting, and improve fertility in women. He provides a series of pharmacological recipes.

Huenerwolf (1644-85), was city physician of Arnstadt.

Fine copies from the Solms ducal library at Lich.

№ I. Ferchl, pp. 200-01. Hirsch, II, p. 855. II. Ferchl, p. 251. Hirsch, III, p. 325.

Pritzel 4315. Waring, p. 605.

A Very Rare Imprint

43. GRUNDLICHER WARHAFFTIGER BERICHT von dem new gefundenen wunder Brunnen, inn der Graffschafft Spiegelberg, zwo meil weges gelegen von Hameln an der Weser. Item, von Natur, eygenschafft unnd wirckung desselben Brunnen, in bewerten Exempeln angezeiget. 4 unnumbered leaves. Small 4to, modern blue wrappers. [Erfurt: Sachse], 1556. \$2950.00

First edition of this extremely rare description — the first? — of the famous mineral waters at Pyrmont in Lower Saxony, just west of the Weser River. While the springs were known since the 14th century, this is, along with Metobius' account which was published in the same year, the first printed record. Pyrmont became a popular and fashionable spa resort in the 17th and 18th centuries.

The anonymous author describes the waters — rich in iron — and their health benefits.

Fine copy and, according to OCLC, no copy in the U.S. The city and printer have been established based on the type.

₩ VD 16 G3609.

44. GUGLIELMINI, Domenico. *Aquarom Fluentium Mensura Nova Methodo inquisita*. Four folding engraved plates. 4 p. l., 59, [1] pp. 4to, cont. vellum over boards (one corner a bit worn). Bologna: Pisari, 1690.

[bound with]:

—. Aquarom Fluentium Mensura, Nova Methodo Inquisita. Pars Altera. 2 p.l., 90 pp. Bologna: Pisari, 1691. \$3750.00

First editions and fine copies. Guglielmini (1655-1710), studied mathematics and medicine at the University of Bologna. He was one of the leading hydraulic engineers of his time and took the professorship of mathematics at the University of Padua. In 1702, he became professor of medicine at the same university, reflecting his varied and changing interests.

"The six books of Guglielmini's work on hydrostatics appear here in their entirety. According to the author, this text presents an entirely new method of measuring flowing water...

"Book one sets forth a general doctrine concerning velocity; the second sets forth the measure of water flow in a single inclined canal; the third concerns the measure of water flow in a horizontal canal, either alone or joined with another horizontal. Book four concerns the measure of flowing water in an inclined canal joined in any manner whatsoever. Book five considers horizontal, vertical, and inclined canals. Book six concerns the fundamentals of the proportional distribution of water from aqueducts, or canals and reservoirs...

"An appendix [the *Pars Altera*] contains a table with examples of its use in measuring flow in an inclined canal, in a horizontal canal, and in canals joined in any manner whatsoever after the rule in book four."–Roberts & Trent, *Bibliotheca Mechanica*, p. 151.

Fine copies. Ex Bibliotheca Mechanica.

Riccardi, I, 642. Rouse & Ince, History of Hydraulics, pp. 68-71.

One of the Most Beautiful Scientific Books of the Renaissance

45. GUIDI, Guidi (also known as Vidus Vidius). *Chirurgia è Graeco in Latinum conversa,* Vido Vidio Florentino interprete, cum nonnullis eiusdem Vidii commentariis. 210 magnificent woodcuts, of which 30 are full-page, showing surgical instruments & operations, elaborate machines for setting fractures, methods of bandaging, etc. Fine criblé initials in the text. 18 p.l., 534 pp. Folio, late 16th-cent. panelled calf (corners & ends of spines expertly repaired, blank portion of title carefully renewed), gilt fleurons in corners of panels & in center, ruled throughout in red. Paris: P. Gaultier, 1544. \$29,500.00

First edition of these ancient Greek medical texts, containing some of the most outstanding Renaissance illustrations of scientific subjects, equalled only by Vesalius' *Fabrica* (1543) and Estienne's *De Dissectione* (1545). Printed at the private residence of Benvenuto Cellini, it is possibly the most artistically illustrated of all treatises on surgery and certainly a monument of the golden age of typography. It was published under the auspices of the King of France, Pope Paul III, and the Duke of Ferrara.

The authorship of the drawings which served as models for the woodcuts in the book has long been open to scholarly question. In an article by Michael Hirst (in *Revue de l'Art*, No. 6 (1969), p. 19f.) it has been conclusively shown that the drawings are almost all by the Italian master Francesco Salviati and not by Primaticcio who was formerly thought to be the artist.

The texts were prepared for presentation to Francois I from an early Byzantine illustrated manuscript containing surgical works by Hippocrates, Galen, and Oribasius, which Guidi translated from Greek into Latin. In addition, he added his own commentaries and commissioned Salviati to prepare the drawings. The Byzantine manuscript was copied from an even earlier Greek manuscript of the first century B.C.; therefore the woodcuts in the 1544 *Chirurgia* provide a direct link with the genuine Hippocratic tradition of surgical practice as transmitted through later Greek channels to Byzantium. The drawings by Salviati were

wonderfully accurate renderings of the surgical apparatus and procedures and were imitated in later works. The *Chirurgia* never again appeared in such a luxurious format; a 1555 French edition came out in octavo format and the illustrations are clumsy and much-reduced. It is known that by 1560 the original *Chirurgia* was already considered a rare book. The manuscript which Guidi prepared and for which Salviati made drawings was presented to Francois I who then asked Guidi to issue a lavish printed edition at the King's expense.

Guidi (1508-69), was royal physician and became the first professor of medicine at the Collège Royal. He lived for several years with Cellini and there are a number of references to him in Cellini's *Autobiography*. Guidi's "name is still attached to the *canalis vidianus* of the sphenoid bone and to the nerve that traverses this canal. Moreover, he made important and original studies of the mechanism of the articulations in the human body resulting from its vertical position in relation to the mechanism of the quadruped articulations."–D.S.B., V, p. 581.

This is a large $(14 \frac{1}{8} \times 9 \frac{1}{2} \text{ inches})$ and fresh copy, ruled in red throughout. A few woodcuts have been shaved at outer margins.

✤ Dibner, *Heralds of Science*, 118. Mortimer 542–(Harvard's copy measures 13 1/2 x 9 1/4 inches).

"An Important Treatise" on Aeronautics

46. GUYTON DE MORVEAU, Louis Bernard, CHAUSSIER, François, & BERTRAND, abbé. Description de l'Aérostate l'Académie de Dijon, contenant le détail des procédés, la théorie des opérations, les dessins des machines & les procès-verbaux d'expériences. Le tout extrait du compte rendu à cette Société par MM. de Morveau, Chaussier & Bertrand. Suivi d'un essai sur l'application de la découverte de MM. de Montgolfier, à l'extraction des eaux des mines. Four engraved plates (three are folding). 1 p.l., v, [1], 224 pp. 8vo, cont. mottled calf ("veau porphyre"), triple gilt fillets round sides, flat spine gilt, red morocco lettering piece on spine. Dijon: Causse; Paris: T. Barrois, 1784. \$5000.00

First edition. "Despite his many activities in chemistry Guyton found time to contribute to a new and exciting application of science. In November and December 1783 the balloon flights of J. F. Pilatre de Rozier and J. A. C. Charles attracted widespread attention, and the Dijon Academy decided to make its own balloon, to be filled with 'inflammable gas.' Guyton tested various gases and eventually...hydrogen was used. Guyton made two flights, with Claude Bertrand, an astronomer, on 25 April 1784, and with C. A. H. Grossart de Virly, lawyer and amateur chemist, on 12 June 1784. During the second flight an attempt was made to steer the balloon with manually operated oars and a rudder, a method that was theoretically sound and seems to have been partly

successful but required too much effort for sustained flight...

"Full accounts of the preliminary calculations and experiments, as well as descriptions of the construction of the balloon and the large-scale production of gas, were published in *Description de l'aerostate* (1784), an important treatise that added to Guyton's international reputation."–D.S.B., V, p. 602.

Guyton's researches initiated the beginnings of aerial warfare, as they prompted the French government to form a corps of military balloonists that saw action at the Battle of Fleurus in 1794.

Very fine copy and attractive copy. Inserted portrait of Chaussier serving as a frontispiece. Engraved armorial bookplate of Chartreuse de Beaune and early ownership ticket of "Sausset" on title.

Smeaton, *Ambix* (1957), p. 26-"Of particular interest to chemists is the chapter containing Guyton's comparative account of the different inflammable gases, obtained by the action of metals on acids, of heat on organic substances, and in other ways."

Chlorine as a Disinfectant

47. GUYTON DE MORVEAU, Louis Bernard. *Traité des Moyens de Désinfecter l'Air, de prévenir la contagion, et d'en arrêter les progrès*. xxxii, 306 pp. 8vo, cont. mottled sheep, sides with single gilt fillet, flat spine gilt, contrasting leather lettering piece on spine. Paris: Bernard, 1801.

\$1650.00

First edition "of a classic book in the history of chemistry and hygiene, in which the use of gaseous chlorine to fumigate churches and hospitals to destroy contagion and diseases is first described."–Neville, I, pp. 562-63. Guyton did important pioneering research on the disinfection of air, having been consulted about the problem of putrid emanations from corpses in the crypt of a Dijon church. Believing that the decaying flesh gave off both ammonia and the disease-carrying particles, he first used hydrochloric acid fumes. Guyton subsequently made the investigations described in his *Traité des Moyens de Désinfecter l'Air* (1801), and then used chlorine, which he found to be an effective disinfectant. A simple apparatus for producing chlorine from common salt is described in his book, which was translated into five languages.

For this service to humanity he was admitted to the Legion of Honor in 1805. Nice copy.

№ Cole 573. D.S.B., V, p. 603.

A Very Handsome Copy

48. HALLER, Albrecht von. Enumeratio Methodica Stirpium Helvetiae indigenarum. Qua Omnium Brevis Descriptio et Synonymia Compendium

Virium Medicarm dubiarum declaratio Novarum et Rariorum uberior Historia... Engraved vignette on title & 24 finely engraved plates (three are folding). Both titles are printed in red & black. 2 p.l., 424 pp.; 1 p.l., 425-794 pp. Two vols. in one. Thick folio, cont. mottled calf (ends of spine & corners a little worn), single gilt fillet round sides, spine richly gilt, red morocco lettering piece on spine. Göttingen: A. Vanderhoek, 1742.

\$8500.00

First edition of Haller's first great survey of Swiss flora. A very fine and handsome copy.

Pritzel 3718. Stafleu & Cowan 2306.

Written, in Part, by Dr. Johnson

49. (HARLEY, Edward, 2nd Earl of Oxford). Catalogus Bibliothecae Harleianae, in Locos communes distributus cum Indice Auctorum. Five vols. 8vo, modern calf-backed marbled boards, spines gilt, red & green morocco lettering pieces on spines. London: Thomas Osborne, 1743-45. \$6500.00

First edition, and a complete set, of this famous catalogue which is the best record we have of the enormous and valuable collection of printed books formed by Robert Harley (1661-1724) and his son Edward (1689-1741).

"As Queen Anne's minister, Robert Harley, starting about 1705, brought together in a few years a library of immense value, containing at least 6000 manuscripts and over 40,000 printed volumes...After Robert Harley's death, his only son Edward Harley...continued the library, which he notably increased by purchases at the various sales of Thomas Rawlinson. Edward Harley died in 1741. The library then contained 7639 manuscripts, 14,236 charters and more than 50,000 printed books. His widow sold the books, in 1743, to the bookseller Osborne for £13,000, considerably less than they had cost to bind...

"The printed books were described by William Oldys in the five volumes of the *Bibliotheca Harleiana* (1743-1745), with a preface by Dr Johnson, who is credited with a not inconsiderable share in the actual compiling of the catalogue...The library was particularly strong in early editions of the Bible, in first editions of the classics and in books printed on vellum."–De Ricci, pp. 33-37.

A very good set. Contemporary inscription on title-page of Vol. 1 of "Thomas H. Webb." This was the bookseller/publisher Thomas H. Webb of Boston, active in the first half of the 19th-century. With embossed stamps of the Connecticut Theological Institute on first and last leaves.

Grolier Club, *Bibliography*, 102–Robert Harley "was one of the first collectors who systematically acquired early printed books." Taylor, *Book Catalogues*, pp. 56, 61, 171, & 244. **50. HENCKEL, Johann Christoph**. *Einige Neuentdeckte Chemisch-Physicalische Wahrheiten, denen Kennern der Natur-Lehre und Arzeney-Bereitungs-Kunst zur Beurtheilung und Anwendung hingegeben*. Several woodcut diagrams in the text. 4 p.l., 80 pp. 8vo, cont. calf (very nicely rebacked), double gilt fillet round sides, spine gilt, red morocco lettering piece on spine. Leipzig: C.G. Hilscher, 1769. \$2250.00

First edition. Henckel (1720-1806), was the city physician of Arnstadt. The present work contains a series of recipes for pharmaceutical preparations; there are frequent references to Boerhaave, Becher, Stahl, Hoffmann, Kunckel, and others. There are several chapters on "chalybeate" waters, or waters with a pronounced iron content.

Fine copy. Very rare with only one copy listed in the U.S. (NLM) by OCLC. Ferchl, p. 225. Ferguson, I, p. 385.

Soap Making

51. HERMBSTAEDT, Sigismund Friedrich. *Die Wissenschaft des Seifesiedens oder, chemische Grundsätze der Kunst, alle Arten Seife zu fabriciren für Seifensieder und Hauswirthinnen, welche diese Kunst verständig ausüben wollen*. xvi, 270 pp. 8vo, cont. half-sheep & speckled boards (two corners a little worn, title with a tiny bit of worming in blank margin), spine gilt, contrasting leather lettering piece on spine (label a little defective). Berlin & Stettin: F. Nicolai, 1808. \$1950.00

First edition of this very rare work on soap making. Hermbstädt (1760-1833), the first chemist in Germany to adopt Lavoisier's views, was professor of technological chemistry at the University of Berlin. His numerous writings in this field proved to be very influential in the development of industry in Prussia. Fine copy. Stamp of Felix Fritz on title.

▶ Poggendorff, I, 1082-83. See Ron, *Bibliotheca Tinctoria*, 519 for the second edition of 1824.

52. HERO OF ALEXANDRIA. *Spiritalium Liber*. A Federico Commandino Urbinate, ex Graeco, nuper in Latinum conversus. 90 woodcuts of apparatus in the text & two large woodcut initials. 2 p.l., 70 (i.e., 80) pp. 4to, cont. limp vellum lettered in manuscript on spine and upper cover (small hole in spine, upper corner of front cover eaten away, also a large upper corner of rear cover & endpaper, tiny piece missing from upper corner of title and last two leaves). Urbino: [D. Frisolino],

1575.

\$2750.00

First edition of the *Pneumatics* of the mechanician, physicist, and mathematician Hero of Alexandria (fl. A.D. 62), an important text in the history of science from antiquity. It contains descriptions and illustrations of some one hundred small machines and mechanical toys, some of his own invention, including siphons, a double forcing pump to be used as a fire engine, a wind-powered pipe organ, a thermoscope, theodolite, contrivances using the force of steam including an aeolipile (the famous reaction steam turbine, which has been called the first steam engine), a coin-in-a-slot device, and other automatic machines. His experiments on the power and use of steam, and the theories at which he arrived, were studied with lively interest by the engineers of the Renaissance. The book was translated by Federico Commandino (1509-75), as part of his effort to make the principal texts of classical science available to Renaissance readers.

This was one of the earliest books printed at Urbino, perhaps the third. The original Greek was not printed until 1693.

A clean and quite large (206 mm. tall) copy.

✤ D.S.B., VI, pp. 310–311. Roberts & Trent, Bibliotheca Mechanica, p. 161. Sarton I, pp. 208–11.

53. HOFFMANN, Friedrich. Gründlicher Unterricht, Wie ein Mensch nach den Gesundheits-Regeln der Heil. Schrifft und durch vorsichtigen Gebrauch weniger ausserlesener Artzneyen...sein Leben und Gesundheit lang conserviren könne. Deme noch beygefüget ein aussführlicher Bericht von der Natur, Eigenschafft und herzlichen Krafft Dess Ungarischen Weins, und von dem...Nutzen der Wasser-Bäder in innerlichen Kranckheiten, Wie auch Von dem Gebrauch und Missbrauch dess Schnupff-Tobacks. Edited by Georg Friederich Reimmann. Title printed in red & black. 11 p.l., 400, [37] pp. 8vo, cont. vellum over boards (light browning & foxing). Ulm: D. Bartholomai, 1722.

First edition. Hoffmann (1660-1742), whom Hirsch calls "one of the heroes of German medicine in the 18th century," was "a leading medical systematist of the first half of the eighteenth century...he became a highly influential teacher and practicing physician in Germany, systematizing coherently the Galenic, iatromechanical, and iatrochemical aspects of the phenomena of health and disease."–*D.S.B.*, VI, p. 458.

In the present work, Hoffmann offers a collection of medical and dietetic instructions developed to improve health. He provides a long description of Hungarian wines and their medical uses. He also recommends bathing in

35

mineral waters.

Very good copy of an uncommon book.

Arents 526–"The learned doctor considers the correct use of snuff important enough to entitle the subject to a separate chapter." Hirsch, III, pp. 256-59.

54. HORNE, Thomas Hartwell. An Introduction to the Study of Bibliography. To which is prefixed a Memoir on the Public Libraries of the Antients. Folding frontis., 11 plates (several folding), & numerous text illus. (including facsimiles & type specimens). xvi, i-[xxvi], [27]-402 pp.; 1 p.l., [403]-758, [2], clvi pp. Two vols. Large 8vo, mid-19th cent. half-morocco & marbled boards, joints & extremities rubbed, spines gilt, t.e.g. London: T. Cadell & W. Davies, 1814. \$850.00

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

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

A very good set.

≈ Besterman 784 & 3561.

55. HUMBER, William. A Comprehensive Treatise on the Water Supply of Cities and Towns with Numerous Specifications of Existing Waterworks. Fine colored lithographed frontis., one lithographed plate at page 169, over 250 text illus., and 50 double-page lithographed plates. xiv, 378 pp., [2] pp. of ads for Humber's other books, & 6 pp. of general ads. Large thick & heavy 4to, orig. green half-morocco (some scuffing), spine gilt. London: Crosby Lockwood, 1876. \$1350.00

First edition, and a lovely copy, of the standard reference work for the great period of the design and construction of waterworks in England. The comprehensive text covers the history of water supply, the chemical composition of water, and its purification. It discusses essential information such as rainfall, springs, wells, reservoirs, and the geology of water-bearing formations, and contains comprehensive chapters on pump and pumping machinery, conduits, meters, domestic fittings, and other technical matters.

The plates, which are extremely detailed, illustrate a number of important projects. The striking colored frontispiece depicts the Wallasey water tower designed by Sir Robert Rawlinson, to whom the book is dedicated.

Fine copy. Inoffensive old German library stamp on half-title, title, and backs of plates.

56. INGENHOUSZ, Jan. Expériences sur les Végétaux, spécialement sur la Propriété qu'ils possèdent à un haut degré, soit d'améliorer l'Air quand ils sont au soleil, soit de la corrompre la nuit, ou lorsqu'ils sont à l'ombre; auxquelles on a joint une Méthode nouvelle de juger du Degré de Salubrité de l'Atmosphère. Traduit de l'Anglois, par l'Auteur. One folding engraved plate. lxviii, 333, [2] pp. 8vo, 19th-cent. green marbled boards & cloth spine (a few insignificant stains in the fore-edge margin, binding slightly rubbed). Paris: P. Fr. Didot le jeune, 1780. \$1250.00

First edition in French, translated by the author himself, describing his discovery of photosynthesis and plant respiration. "In the summer of 1771 Joseph Priestley had found that plants could restore air that had been made unfit for respiration by combustion or putrefaction...Ingenhousz established that only the green parts of a plant can 'restore' the air, that they do this only when illuminated by sunlight, and that the active part of the sun's radiation is in the visible light and not in the heat radiation. In addition, he found that plants, like animals, exhibit respiration, that respiration continues day and night, and that all parts of the plant — green as well as non-green, flowers and fruit as well as roots — take part in the process."–D.S.B., VII, p. 12. Ingenhousz thus proved that animal life is dependent ultimately on plant life, a discovery of fundamental importance in the economy of living things.

A good copy. The first edition, in English, appeared the year before.

57. JONES, Rev. William, of Nayland. *Physiological Disquisitions; or, Discourses on the Natural Philosophy of the Elements. I. On Matter. II. On Motion. III. On the Elements. IV. On Fire. V. On Air. VI. On Sound and Music. VII. On Fossil Bodies. VIII. On Physical Geography; or, the Natural History of the Earth. IX. On the Weather.* Nine engraved plates (2 folding), engraved coat-of-arms of the dedicatee, & one woodcut in the text. viii, xxvii, [1], [iv], 627 pp. 4to, orig. boards (slight foxing & dampstaining to first & final

leaves), new paper spine to match, uncut. London: J. Rivington, 1781. \$1250.00

First edition. This work is an elaboration of the author's *Essay on the First Principles of Natural Philosophy* (1762). "The discourses on the elements, fire, nature and properties of air, and fossil bodies are of chemical interest. Jones discusses the nature of acids, alkalies, salts, spirits, metals, phlogiston, the *tria prima*, calcination, etc. with references to Hales, Boerhaave, Crawford, Amontons, Papin, Becher, Stahl, Shaw, et al. The discourse on air covers chemically prepared gases, with reference to the work of Van Helmont, Boyle, Lavoisier, Priestley, Ingenhousz, et al. There are several references to electricity. Rare."–Neville, I, p. 698.

For a good account of Jones, and in particular his work in music, see Kassler, *The Science of Music in Britain 1714–1830*, pp. 589–602.

A very good copy. Early signature of W.J. Campion on front paste-down.

✤ Cole 696. Wheeler Gift Cat. 500– (with references to lightning and the aurora borealis).

"A Monument of Typographical Bibliography"

60. LAMBINET, Pierre. Recherches Historiques, Littéraires et Critiques, sur l'Origine de l'Imprimerie; particulièrement sur ses premier établissemens, au XVme. siècle, dans la Belgique. Two engraved plates & a few text illus. 1 p.l., xvi, 500 pp. 8vo, mid-19th cent. sheep-backed marbled boards, spine gilt. Brussels: E. Flon, An VII [1799]. \$1500.00

First edition of one "of the monuments of typographical bibliography."–Bigmore & Wyman, I, p. 418. Lambinet's book is the result of much original historical research on the spread of printing in the 15th century. The author also treats the history of papyrus, vellum, paper; blockbooks and typefounding; the origins of printing with moveable type; etc.

Nice large copy with many edges uncut.

61. [LE PRINCE, Nicolas Thomas]. *Essai Historique sur la Bibliotheque du Roi, et sur chacun des dépots qui la composent, avec la Description des Batimens, & des objets les plus curieux à voir dans ces différens depots.* xxi, [3], 372 pp. 12mo, 19th cent. calf-backed marbled boards by Merson, spine nicely gilt, contrasting morocco lettering pieces on spine. Paris: Belin, 1782. \$550.00

First edition, first printing, of this detailed work, the first to provide accounts of the various donations made to what is now the Bibliothèque Nationale. This printing includes the section on the other libraries of Paris (pp. 337-72), suppressed in the second printing.

Fine copy and scarce.

Peignot, p. 64–"Ce petit volume n'est plus dans le commerce; on le consulte avec intérèt."

62. LYELL, Charles. *Elements of Geology*. Hand-colored frontis. & numerous woodcut illus. in the text. xix, [1], 543, [1] pp. 12mo, 19th-cent. calf (title torn in gutter). London: J. Murray, 1838.

[bound with]:

PHILLIPS, John. *A Guide to Geology. Second Edition*. Three engraved plates (somewhat foxed) from drawings by the author (one serving as a frontis.). xii, 168 pp. London: Longman, 1835. \$650.00

I. First edition. While Lyell's *Principles of Geology* was largely theoretical, the *Elements* was mostly descriptive. "Lyell's *Elements* was the first modern textbook of geology written on the assumption that geological phenomena could be explained completely in terms of natural and knowable causes...[It is] a model of simple, lucid exposition."–D.S.B., VIII, p. 570.

II. Second edition. Phillips was the nephew, amanuensis, and constant companion of William Smith, and a leading geologist in his own right. The *Guide* was "so orderly and comprehensive as to be noteworthy."–Challinor. The frontispiece added to this edition is "a new plate…of a peculiar kind" (p. xii), and represents the first appearance of this form of geological illustration.

Very good copies.

Challinor, History of British Geology, 129, 138, and p. 107.

Oceanographic Observations and Dyeing

63. [MARSIGLI, Luigi Ferdinando, Conte]. Brieve Ristretto del Saggio Fisico intorno alla Storia del Mare. Scritta alla Regia Accademia delle Scienze di Parigi. Woodcut headpiece vignettes & three handcolored engraved plates. 2 p.l., [4], 72 pp. Large 4to, attractive modern decorated boards. Venice: A. Poletti, 1711. \$2000.00

First edition of this very scarce book by the father of the discipline of oceanography. Marsigli (1658-1730), founder of the Accademia delle Scienze dell'Istituto di Bologna, combined his love of travel with the sharp eye of an observer imbued with the Galilean method. His *Histoire Physique de la Mer* (1725) is regarded as the first treatise on oceanography.

The first part of this work (pp. 1-52) contain Marsigli's valuable observations on coral (he was one of the first to recognize that corals were animals) and the fish and vegetation found in the sea.

Part II (pp. 53-72), addressed to Vallisnieri, is devoted to kermes, the most ancient dyestuff on record. Kermes consists of a wingless female insect which is found on the leaves of the oak kermes, a tree which abounds in southern Europe. As soon as their eggs are about to be hatched these insects are collected, killed by exposure to the vapor of hot vinegar and dried, when they appear as reddish brown grains. Before the advent of cochineal, this material was extensively employed throughout Europe, and the red color which is found on many ancient tapestries is to be ascribed to its use.

Two of the plates depict the oak kermes and the insect and the other plate shows coral.

Fine and large copy.

Ron, Bibliotheca Tinctoria, 714.

A Fine Copy of the Camerarius Mattioli

64. MATTIOLI, Pietro Andrea. Kreutterbuch...jetzt widerumb mit viel schönen neuwen Figuren, auch nützlichen Artzneyen, und andern guten stücken, auss sonderm fleiss gemehret, und verfertiget durch Joachimum Camerarium... Title, printed in red & black, with large woodcut border by Jost Amman, ca. 1000 woodcuts in the text, & printer's device on colophon leaf, also by Amman. 8 p.l., 460, [38] leaves (the last a blank). Large folio, cont. blindstamped pigskin over wooden boards (for more on binding, see below), orig. brass clasps & catches. Frankfurt: [S. Feyerabend, P. Fischer, & H. Dack], 1586. \$32,500.00

First edition, and a superb copy, of the first edition of Camerarius's version of Mattioli's great herbal. The first German edition had appeared in 1563 in Prague, translated by Georg Handsch (1529-78). For our edition, Joachim Camerarius (1534-98), took Handsch's translation and added his own extensive commentary; these passages are marked by asterisks.

This edition contains the celebrated Gesner/Camerarius suite of woodcuts. Gesner had been preparing material for a massive *Historia plantarum* but died before finishing the task. Camerarius acquired the material, utilized the woodcuts in the present work and supplemented them with his own. They are remarkable in their scientific detail, especially the enlarged depictions of floral structure, seeds, and fruit. This is the first time that such representation was consistently followed, and marks the beginning of what only much later became a convention in scientific botanical illustration, when the taxonomic importance of these details was fully appreciated. They also appeared in Camerarius' recension of Mattioli, *De Plantis Epitome utilissima* of the same year (which is a different text from the above, and not merely a Latin version of the same).

In addition to the botanical cuts, the German edition contains seven woodcuts

of distilling apparatus.

In the Foreword, Camerarius describes in detail the history of the production of this book, and of the woodblocks in particular. Not all of the Gesner woodblocks were finished when Camerarius set out to edit Mattioli's text. In supervising the cutting of the already executed designs of the blocks, he took much care in assuring they were botanically correct. In the preface he gives a list of woodcuts already finished, but not botanically correct, and describes how the depicted configurations and shapes of leaves differ from nature.

The fine title woodcut has, within an oval at top, a female figure seated and feeding a snake, with the motto "Bonae Valetudini Digatum"; at bottom another oval containing a fine small agricultural scene, with a tree surrounded by a woven fence at center, having the motto "Wan Gott Wil / Spes," the whole surrounded by the motto "Omnia Florebunt Prospiciente Deo." The compartment is inscribed at the bottom left "C S", and at right "I A".

Binding: contemporary blindstamped pigskin over wooden boards, two rolls bearing the monogram "M. N." (attributed by Haebler, *Rollen und Plattenstempel*, 313, 1 and 2, to Martin Nebert of Nuremberg). With the original brass clasps and catches.

Provenance: Slightly later manuscript entry at foot of title: "Weil dieses Buch in meiner Bibliothec doppelt gewesen, habe diese Theil meinem lieben Hn: Schwager Tit: Hn: George Herman von Schweinitz geschencket. Hans Friedrich v. [?]Mutschelnitz."

A fine, tall, and crisp copy with many lower edges uncut. A few gatherings with some very slight browning and a small patch of marginal worming on leaves 243-53 not affecting text. The binding is somewhat soiled.

A Gold Hoard

65. MELLE, Jacobus. [Drop-title]: *Commentatiuncula De Simulachris Aureis, quae in Boringholmia, Maris Balthici Insula, agris eruuntur*. One engraved plate. 16 pp. Small 4to, attractive modern marbled wrappers. Lubeck: J.N. Thun, 1725. \$375.00

First edition of this very rare work describing a gold hoard found on the island of Bornholm in the Baltic Sea. Melle speculates on the figures' origins. Many gold hoards have been found on Bornholm, mostly dating from the Late Roman period.

Melle (1659-1743), German scholar and numismatist, studied at Kiel and Jena and travelled to Holland, England, and France before becoming a pastor in Lubeck and devoting his leisure time to writing on coins and medals, German history, and natural history.

Fine copy. The plate depicts twenty gold figures.

Surprisingly Scarce on the Market

66. MUSSCHENBROEK, Petrus van. *Physicae Experimentales, et Geometricae, de Magnete, Tuborum Capillarium Vitreorumque Speculorum Attractione, Magnitudine Terrae, Cohaerentia Corporum Firmorum Dissertationes: ut et Ephemerides Meteorologicae ultrajectinae.* **28** folding engraved plates, one large folding engraved chart, & a folding printed table. Tables in the text. Title printed in red & black. 5 p.l., 685 pp. Large 4to, cont. half-vellum & paste-paper boards (covers rather rubbed, spine a little wormed), spine lettered in gilt. Leyden: S. Luchtmans, 1729.

\$3000.00

First edition and a surprisingly scarce book on the market. "Numerical data on the laws and phenomena of magnetism. Law of distance, p. 20; action of flames, p. 70; whirling magnet, p. 116; consequent poles, p. 243; declination at Paris and London, p. 150; dip, p. 206. Contains Halley's chart of magnetic lines."–Wheeler Gift Cat. 268–(illustrated).

This work is also notable for containing Musschenbroek's experiments on the strength of materials, capillarity, and cohesion. "Of particular relevance to this collection is 'Introduction ad Cohaerentiam Corporum Firmorum,' accompanied by a number of plates illustrating fractured test specimens and testing apparatus. Also of relevance is the chapter 'Tentamen de corporum Duritiâ,' which concerns the hardness of materials."–Roberts & Trent, *Bibliotheca Mechanica*, p. 232.

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.

Very good copy, preserved in a box. Ex Bibliotheca Mechanica.

"The First Exposition of Stahl's Phlogiston Theory in English"–Cole

67. NEUMANN, **Caspar**. *The Chemical Works...Abridged and Methodized*. With Large Additions, containing the Latest Discoveries and Improvements made in Chemistry and the Arts depending thereon, by William Lewis... 8 p.l., 586, [38] pp. 4to, cont. calf (upper joint cracked at head, minor foxing at beginning & end), red morocco lettering piece

on spine. London: W. Johnston, Keith, & E. Dilly, 1759. \$1500.00

First edition in English, with considerable additions based on his own experiments by the translator William Lewis, author of the *Commercium Philosophico-Technicum* (London: 1763-65). Neumann (1683–1737), contributed significantly to the establishment of Stahlian chemistry in Germany and its dissemination throughout Europe. "He distinguished clearly between pure and applied chemistry and insisted that the chemical approach to nature was vastly superior to the mechanical philosophy."–D.S.B., X, p. 26.

"The text is divided into three approximately equal parts covering the mineral, vegetable and animal kingdoms. One of the best textbooks of the period, it contains (according to Cole) 'the first exposition of Stahl's phlogiston theory in English.' A bibliography of Neumann's publications appears in the preface."–Neville, II, p. 222.

A very good copy. Bookplate of William Downes on front paste-down. Cole 973. Partington II, pp. 702–706.

68. NICHOLSON, William. A Dictionary of Practical and Theoretical Chemistry, with its Application to the Arts and Manufactures, and to the Explanation of the Phaenomena of nature: including throughout the latest Discoveries, and the Present State of Knowledge on those Subjects. 13 engraved plates (two folding) & 14 printed tables (13 folding). 820 unnumbered pp. 8vo, cont. diced calf (joints & ends of spine neatly repaired, extremities with minor rubbing), green morocco label on spine. [London]: R. Phillips, 1808. \$750.00

Second and final edition, extensively revised, of Nicholson's great two-volume dictionary of chemistry which first appeared in 1795. "The author did not call this a second edition since it is in effect a totally new work, greatly enlarged and extensively rewritten to bring it up to date. The Appendix contains, in addition to tables, Davy's Bakerian Lecture read Nov. 19, 1807 on the decomposition of the fixed alkalis by electricity."–Cole 975.

A very good copy.

Neville II, p. 227.

Printed as a Memorial

69. (NICOLAI, Cornelius). *Bibliotheca Nicolaiana, in duas Partes divisa...* Engraved frontis. 4 p.l. (incl. the frontis.), 318, [2] pp.; 123, [1] pp. Two parts in one vol. 8vo, cont. vellum over boards (somewhat stained & buckled, some light foxing). Amsterdam: sumptibus Haeredum, 1698. \$4000.00

A very uncommon private library catalogue, issued after the collector's death at the age of 24. Nicolai, a rich young man, had formed a very considerable collection of books, coins, and art in the few years given to him.

"There are two catalogues of his library: one in 8vo [the present one] with an engraved frontispiece, printed 'sumptibus Haeredum', Amsterdam in 1698. The other is the duodecimo catalogue for the auction sale held by the Jansson-Waesberghe firm, beginning on 24 November the same year. The octavo catalogue may have been printed by the heirs to elicit an offer for the library as a whole; but the frontispiece and the preface give the impression that the primary purpose of this catalogue was memorial."–Pollard & Ehrman p. 205–(& see Table XXV & no. 219).

This catalogue contains, besides Nicolai's books (rich in medicine and chemistry), his portraits of scholars by Rubens and Frans Hals, a long series of Greek and Roman coins, and some ancient marbles.

Very good copy. Signature of "C. de Coup. 1701" on title.

First English Book on Surveying of the 17th Century

70. [NORDEN, John]. *The Surveiors Dialogue, Very profitable for all men* to peruse, but especially for all Gentlemen, or any other Farmar, or Husbandman, that shall either have occasion, or be willing to buy or sell lands: As in the ready and perfect Surveying of them, with the manner and Methode of keeping a Court of Survey with many excellent rules, and familiar Tables to that purpose. As also, the true and right use of the Manuring of grounds...Now newly imprinted. And by the same author inlarged, and a sixt Booke newly added...Divided into sixe Bookes by I.N. Woodcut diagrams in the text. 8 p.l. (incl. the first leaf, blank but for the signature "A"), 103, 96–144, 153–184, 145–152, 155–120 [i.e. 220], 1 leaf of errata. Small 4to, cont. limp vellum, doeskin ties. London: Printed by W.S. for I. Busby, 1610.

Second edition, greatly enlarged, of the first English book of the 17th century on surveying, and a very fine and fresh copy in its first binding of contemporary limp vellum. Most of the copies offered for sale have been imperfect or in poor condition. There were three editions between 1607 and 1618.

"Norden's fame came from his cartography, but surveying was always the mainstay of his career...In 1600 he was...appointed surveyor of crown woods and forests in southern England, and in 1605 he added the surveyorship of the duchy of Cornwall...It was from this position of eminence that in 1607 Norden published *The Surveyor's Dialogue* as a text to educate the landowner and tenant

in the usefulness and trustworthiness of his profession. Surveyors were often considered the landowner's creature and were accordingly distrusted by tenants. A popular work, the *Dialogue* shows Norden as a compassionate man, in sympathy with the respectable and hard-working of every class; the book ran to three editions in his lifetime."–ODNB.

In addition to containing rich detail of the legal technicalities concerning the court of survey, the work also describes for the first time in English the difference between a theodolite and a circumferentur.

According to ESTC this is probably the first of three issues (only the Bodleian and University of London Library). Pages 153–184 (quires M and N) consist partly of tables which are unsold sheets from the first edition of 1607.

Fine copy. It is very unusual and so pleasant to have an early English book in such lovely state.

Richeson, *English Land Measuring to 1800*, pp. 92–94–"this text is important because of Norden's clear account of the operation of the court of survey and because of his efforts to reconcile the differences between surveyor and tenant. His methods are generally superior to those given by sixteenth-century writers on surveying." Taylor, *Mathematical Practitioners of Tudor & Stuart England* 1485-1714, 113.

A Very Fine and Handsome Set

71. OSMONT, Jean Baptiste Louis. *Dictionnaire Typographique, Historique et Critique des Livres Rares, Singuliers, Estimés et Recherchés en tous genres...* xii, 515 pp.; 2 p.l., 456, [3] pp. Two vols. 8vo, cont. speckled calf, double gilt fillet round sides, spines gilt, olive green lettering pieces on spines. Paris: Lacombe, 1768. \$1500.00

First edition. This work "had a large share in determining the character of later French catalogues of rare books. In this success it resembles Vogt's *Catalogus*, which similarly determined the character of kindred works in Germany during the eighteenth century. Osmont's title suggests and his preface states clearly that he was making a list of choice books suitable for a good private library as well as a list of rare books."–Taylor, *Catalogues of Rare Books*, p. 25.

Osmont received the assistance of Barthelemy Mercier, librarian of the abbey of Ste.-Genevieve, and Albert Francois Floncel, the royal censor and owner of a large library of Italian books. Osmont listed over 7000 entries and many were annotated with market values.

A uncommonly fine and handsome set.

His Writings on Natural Philosophy

PARACELSUS. *Philosophiae Magnae...Tractatus aliquot, jetzt erst in Truck geben, unnd hiernach verzeichnet*. Title within typographical border & a full-page woodcut of the author, aged 47, on verso of A⁴. 4 p.l., 247, [2] pp. Small 4to, attractive antique mottled calf by Aquarius (final leaf with some skillful marginal repairs), spine gilt, green morocco lettering piece on spine. Cologne: A. Byrckman, 1567.

First edition of this important collection of writings; it is the chief collection of Paracelsus's works on natural philosophy, translated here into German. The texts are: "De Vera Influentia rerum"; "De Inventione Artium"; "De Sensu & Instrumentis"; "De Tempore Laboris & Requiei"; "De Bona & Mala Fortuna"; "De Sanguine ultra Mortem"; "De Obsessis a Malis Spiritibus"; "De Somniis, & Erynibus in Somno & annexis"; "De Animabus Hominum post Mortem apprentibus"; "De Lunaticis"; "De generatione Stultorum"; "De Homunculis"; "De Nymphis, Sylvanis, Pygm. Salamand. &c."; "De Imaginatione"; "De Maleficis & eorum operibus"; and "De Animalibus ex Sodomia natis."

Very good copy. While this is a book well-represented in libraries, it is most uncommon on the market.

🍽 Sudhoff 86.

73. PARKES, Samuel. *The Chemical Catechism, with Notes, Illustrations, and Experiments. The Fourth Edition, containing the New Discoveries and other considerable Additions*. Folding engraved frontis. (caption to frontis. shaved but legible). xvi, 562 pp. 8vo, cont. speckled calf (spine slightly rubbed, worn at head, upper joint broken), spine gilt, new red morocco lettering piece on spine. London: Printed for the Author, & sold by Lackington, Allen, 1810. \$350.00

Fourth edition of a popular and successful work that went through thirteen English editions and several translations. This edition was largely rewritten to accommodate the recent discoveries of Sir Humphry Davy.

Good copy. Probably lacking a final leaf of ads.

74. PAYEN, Anselme & CHEVALLIER, Jean-Baptiste-Alphonse. *Traité Élémentaire des Réactifs, leurs Préparations, leurs Emplois spéciaux et leurs Applications à l'Analyse*. Two folding engraved plates of apparatus. viii, 223, [1] pp. 8vo, cont. calf-backed blue boards (upper cover stained, some foxing, pale dampstain in upper margin of first and last few leaves

and on the plates), spine gilt. Paris: Bachelier, 1822.

First edition of "the first French treatise on chemical reagents."–Zeitlinger. Dedicated to their teacher, Vauquelin, this is the first substantial publication of these well-known chemists, one a manufacturing chemist, the other a pharmacist. The book was very successful and went through several editions during the next twenty years.

"The authors describe the preparation of numerous reagents and their use in the analysis of inorganic and organic compounds, including minerals and substances derived from plants and animals."–Neville II, p. 281.

Very good copy. Signed by the authors on the half-title.

▶ Duveen p. 462–(without mentioning the plates). See Cole 1018–(2nd ed. of 1825).

75. PEIGNOT, Gabriel. *Répertoire de Bibliographies Spéciales, Curieuses et Instructives…* xv, [1], 286 pp. 8vo, mid-19th cent. red morocco-backed marbled boards, uncut. Paris: Renouard & Allais, 1810. \$500.00

Second edition, greatly enlarged (1st ed.: 1808 and limited to 100 copies only on blue paper) of this valuable collection of special bibliographies dealing with 1) books printed in very limited editions; 2) books printed on colored paper; 3) books which are entirely engraved; and 4) books whose titles end in *-ana*. Each entry has been fully annotated by Peignot.

Very nice copy. Two 19th century bookplates, one armorial and the other of L. Veydt.

Besterman 910. Bigmore & Wyman, II, p. 149. Petzholdt, pp. 9-10.

76. PEIGNOT, Gabriel. *Manuel du Bibliophile, ou Traité du Choix des Livres*. lx, 413 pp.; 2 p.l., 492 pp. Two vols. 8vo, cont. half red-morocco & marbled boards (minor rubbing, occasional light foxing), flat spines gilt, outer & lower edges uncut. Dijon: V. Lagier, 1823. \$1250.00

Second edition, completely revised and greatly augmented, of Peignot's *Traité du Choix des Livres* (1817); this is one of Peignot's most important works. In this edition, Peignot has divided the text into five sections. The first describes the methods of selecting the best editions. Part Two gives an account of books which were the favorites of famous authors. The third part is a list of the great literary texts of the past. Part Four lists the best and most beautiful editions of these texts. The fifth part offers practical instructions on how to form a library and information on bindings, bibliographies, classification systems, proper conservation, etc.

A fine and tall set. Armorial bookplate of Joseph Tasker, Middleton Hall, Essex. Brunet, IV, 467.

\$750.00

77. (PERKINS, Walter Frank). Catalogue of the Walter Frank Perkins Agricultural Library. Frontis. port. xii, 291 pp. 8vo, orig. cloth. Southampton: University Library, 1961. \$25.00

An important collection of English books, with useful collations. With a "Memoir" of Perkins (1865-1946), farmer, bibliophile, bibliographer of British and Irish agriculture, and member of Parliament, by his daughter.

Fine.

He Developed the Classical Stone Arch Bridge to its Ultimate Perfection

78. PERRONET, Jean Rodolphe. *Mémoire sur la recherche des moyens que l'on pourroit employer pour construire de grandes Arches de pierre de deux cents, trois cents, quatre cents, & jusqu'à cinq cents pieds d'ouverture, qui seroient destinées à franchir de profondes vallées bordées de rochers escarpés. One large folding engraved plate.* 1 p.l., 44 pp. Large 4to, modern boards (minor foxing), uncut. Paris: de l'Imprimerie Nationale, 1793. \$5000.00

First edition, presentation copy, inscribed on the title "Au Cit. Rondelet de la part de l'Auteur." The recipient was Jean Rondelet (1734-1829), the great French architect who worked on so many of the most important projects of the time (see *N.B.G.*, Vol. 42, 600-01).

"This *Mémoire* on his monumental concept of masonry bridges with spans of 200 to 500 feet is the rarest of all Perronet's works. Inspired by some of the great spans of the past (Verona 150ft or Pontypridd 178ft) he asks why, 'dans un siècle ou les sciences & les arts ont fait de si grands progrès, ne pourroit-on pas se flatter d'en établir solidement qui ayent encore plus d'ouverture?'...

"Perronet is fascinated by the challenge of building such huge spans, particularly that of 500ft, and three main problems are considered. The first of these is the choice of stone and here he draws on his considerable knowledge, derived from experiments carried out on the strength of stone from quarries all over France, as well as citing his experience during the construction of the Neuilly bridge. The other two problems concern the design of centring for such a gigantic arch and the method of dismantling it after the keystone has been put in place. Here, too, he brings his unparalleled experience to bear in his design but cites the theoretical works of Parent, Buffon, Musschenbroek and Couplet to prove its feasibility...

"The spandrels of his arch were to have been pierced by three voids, reminiscent of the Pontypridd bridge, and the design and construction of these are discussed, together with the retaining walls, the fill of the haunches behind the spandrel walls etc. Altogether a remarkable work (illustrated with a single magnificent plate)."–Elton, *Cat. 5*, 42.

Perronet (1708-94), was the founding director of the École des Ponts et

Chaussées and developed the classical stone arch bridge to its ultimate perfection.

The fine and very large plate depicts the projected 500 foot bridge and has an engraved flap pasted over a portion of the image to show before-and-after effects.

Very good copy. Ex Bibliotheca Mechanica.

▶ D.S.B., X, pp. 527-28. Picon, French Architects and Engineers in the Age of Enlightenment, pp. 167-68.

PLANCK, Max. Vorlesungen über Thermodynamik. vi, [1], 248 pp.8vo, orig. light brown cloth lettered in darker brown, uncut. Leipzig: Veit& Comp., 1897.\$650.00

First edition of this classic work of modern physics that was the culmination of Planck's earliest field of research, and which became the standard reference work on the subject. It comprises a series of fundamental papers on thermodynamics, including his rare 1879 thesis and all his important papers up to 1896.

"Planck's Vorlesungen was effective for more than thirty years as an exceptionally clear, systematic, and skillful presentation of thermodynamics."–D.S.B., XI, pp. 9-10.

A very good copy.

▶ Roberts & Trent, *Bibliotheca Mechanica*, p. 253–"This exceptionally lucid exposition of thermodynamics serves as a summary of Planck's early career."

Poleni's Calculating Machine

80. POLENI, Giovanni, Marchese. *Miscellanea*. Hoc est I. Dissertatio de Barometris, & Thermometris, II. Machinae Aritmeticae, eiusque usus Descriptio, III. De Sectionibus Conicis Parallelorum in Horologiis Solaribus Tractatus. Finely engraved vignette on title & 9 folding engraved plates. 4 p.l., 56 pp. 4to, cont. vellum over boards (a few minor defects to binding). Venice: A. Pavinus, 1709. \$12,500.00

First edition of Poleni's first book; it is today a scarce work on the market. It includes dissertations on barometers, thermometers, and conical sections in sundials, as well as an illustrated treatise describing his arithmetical calculating machine.

Poleni invented his "pin-wheel" calculating machine after reading about those of Pascal (1645) and Leibniz (1671). He built it out of wood, but destroyed it when he heard that Brauer, a Viennese machine-maker, had presented another

calculating machine to the Emperor. This book is therefore the only record of his invention and its illustrations were the basis of IBM (Italia)'s reconstruction of it.

"The 'pin-wheel' was embodied in a calculating machine which was devised, and constructed in hard wood, by the Italian nobleman, G. Poleni (see his *Miscellanea*, Venice, 1709). The pin-wheel is a toothed wheel, the number of whose teeth can be varied at will; a simple movement causes 1,2,3... and up to 9 teeth to project; these interact with an equal number of teeth on the cog-wheel controlling the dial whenever the pin-wheel is turned through a complete revolution, and the pointer is moved forward by an equal number of places. Poleni's mechanism for carrying numbers was somewhat akin to Pascal's *sautoir*, but it was operated by suspended weights instead of by springs."–Wolf, II, p. 656.

Pin-wheels have the advantage over stepped reckoners of occupying less space. They were employed in the nineteenth century by Thomas, and by the Russian inventor W.T. Odhner, whose calculating machine was later developed into the well-known Brunsviga Calculator.

Two of the folding plates depict the whole machine in its supporting frame and the complicated gearing mechanisms at its center.

Fine and fresh copy. Early ink stamp "SIP" on title in two places. Riccardi, I, 290.

Swedish Steel Production

81. RINMAN, Sven. *Anledningar til Kunskap om den gröfre Jern- och Stål-Förädlingen och des Förbättrande*. 8 p.l., 368 pp. 8vo, cont. half-calf & speckled boards (head of spine a bit chipped, occasional minor foxing), spine gilt, contrasting leather lettering piece on spine. Stockholm: H. Fougt, 1772. \$2500.00

First edition of Rinman's first important book, a manual on the refinement and production of superior iron and steel; it contains many chemical experiments. Rinman (1720-92), "devoted his working life to the metal industries. As director of mining and metallurgy and as adviser to proprietors and managers of mines and iron works all over Sweden...Rinman made substantial theoretical and practical contributions to the improvement of iron and steel production methods, especially of charcoal blast furnaces. His works, both published and unpublished, are highly esteemed sources for knowledge of iron- and steelmaking during the eighteenth century, both in Sweden and in the countries he visited...A first-rate inventor and a skilled scientist, he is known as the 'father of the Swedish iron industry'."–D.S.B., XI, p. 463.

Fine copy.

№ Neville, II, p. 378–"Rare."

A Fine Set

82. ROBINS, Benjamin. *Mathematical Tracts...Vol. I containing his New Principles of Gunnery, with several subsequent Discourses on the same Subject, the greatest Part never before printed...Vol. II. Containing his Discourse on the Methods of Fluxions, and of Prime and Ultimate Ratios, with other Miscellaneous Pieces*. Three engraved plates (one folding) & numerous diagrams in the text. xlvi, [2], 341, [3] pp.; 1 p.l., 380 pp. Two vols. 8vo, cont. speckled calf (head of spine of Vol. II with tiny chip), spines gilt, red morocco lettering pieces on spines. London: J. Nourse, 1761.

\$3750.00

First edition, edited by Dr. James Wilson. This collection contains Robins' book on gunnery, the polemics on the *vis viva* controversy, other articles read to the Royal Society but until then unpublished, reprints of the published articles, and Wilson's personal comments on the life and character of his old friend.

Robins (1707-51), "is best known as the inventor of the ballistic pendulum. Today the device is used to demonstrate conservation of momentum as well as for the purpose to which Robins put it: to determine the muzzle velocity of bullets...Much of his writing was devoted to attacks on Newton's enemies — Leibniz, the Bernoullis, Berkeley and James Jurin. Robins took part in the celebrated *vis viva* controversy, the subject of most of his polemics...His other work on ballistics was far from trivial, including studies of the resistance of fluid media to high-speed objects, pressures on projectiles inside a gun barrel, the rifling of barrel pieces, and the shape of actual, as opposed to ideal, trajectories."–D.S.B., XI, pp. 493-94.

Fine set with the engraved armorial bookplates of Hans Sloane, Esq.

▶ Roberts & Trent, *Bibliotheca Mechanica*, pp. 279-80. Sotheran, I, 4043–"Very rare."

The First Edition in English

83. ROHAULT, Jacques. *Rohault's System of Natural Philosophy, illustrated with Dr. Samuel Clarke's Notes taken mostly out of Sir Isaac Newton's Philosophy. With Additions*. Done into English by John Clarke. Titles printed in red & black & within rules. 27 folding engraved plates. 18 p.l., 285, [3] pp.; 292, [24] pp. Two vols. 8vo, cont. panelled calf (short cracks at heads of spines, some light browning), spines richly gilt, red morocco lettering pieces on spines. London: J. Knapton, 1723.

\$3000.00

First edition in English of Rohault's *Traité de Physique,* "one of the main channels through which Cartesian physics were disseminated and maintained throughout Europe from the 1670s to well into the eighteenth

51

century."–Gjertsen, *The Newton Handbook*, p. 531. This edition is important for its commentary on Newton in the extensive footnotes, and the translator's notes exposing fallacies in the Cartesian system. It was *the* textbook of physics at Cambridge for a long period and introduced the Newtonian system there, unseating the Cartesian system.

A very attractive set. Armorial bookplate of Henry John Sperling. There were further editions in 1729 and 1735.

✤ D.S.B., III, p. 294–"Making use of his familiarity with Newtonian physics, Clarke appended to his edition a series of notes that had the novel effect of turning a Cartesian treatise into a vehicle for disseminating the ideas of Newton. His translation remained the major text at Cambridge for over forty years."

First American Steamboats

84. RUMSEY, James. A Short Treatise on the Application of Steam, whereby is clearly shewn, from Actual Experiments, that Steam may be applied to propel Boats or Vessels of any burthen against Rapid Currents with Great Velocity. The same Principles are also introduced with Effect, by a Machine of a simple and cheap Construction, for the Purpose of raising Water sufficient for the working of Grist-Mills, Saw-Mill, &c. and for Watering Meadows and other Purposes of Agriculture. 26 pp., one blank leaf. 8vo, bound in calf by W. Pratt for Henry Stevens & Son in 1886, double gilt fillet round sides, spine gilt, black morocco lettering pieces on spine, uncut. Philadelphia: Printed by J. James, 1788.

First edition, issue with corrected title, of this incunable of steam navigation. During the second half of the 1780s James Rumsey and John Fitch each invented a steam-powered boat. Rumsey's was propelled by jets of water through the stern and Fitch's by paddles. Fitch obtained a privilege for the manufacture of steam vessels, but Rumsey claimed priority for his steamboat, patented in 1791. These two vessels were the first successful steamboats in America.

Despite two successful runs on the Potomac in December 1787, Rumsey's steamboat did not last long. Rather than use steam power to move paddles, Rumsey applied steam in a form of jet propulsion by designing a cylinder that drew water into a pipe and then pushed it out the stern at a greater velocity. Furthermore, instead of using a large kettle boiler, Rumsey devised a tubular system. He could use his Watt-type, single-acting engine to generate greater pressure, but not enough to drive his boat more than four or five miles per hour. Even at that speed the soldered joints would not hold, and Rumsey's boat enjoyed no commercial success.

The *Short Treatise* includes a chronology of events, an explanation of the technical operation of the vessel, and affidavits. According to the

"Advertisement" on the verso of the title, Rumsey states that this book has been reprinted with corrections and additions from "a pamphlet published in Virginia," of which "a few copies were then thought sufficient." However, neither Sabin, *N.U.C.*, nor ESTC know of that pamphlet. Rink suggests that an edition was printed at Richmond.

It should be noted that Rumsey and Fitch never put aside their differences and through their bitter rivalry they helped bring an end to the patchwork state patent system, which was replaced by the first federal patent act in 1790.

Very fine and fresh uncut copy. With Henry Stevens' English bookplate and that of the Scott Library of Naval Architecture.

Rink, Technical Americana, 2924.

"Of Great Value"

85. TARGIONI-TOZZETTI, Giovanni. Notizie degli Aggrandimenti delle Scienze Fisiche accaduti in Toscana nel Corso di Anni LX. Del Secolo XVII. Engraved arms on each title & eleven folding engraved plates. xxiv, 531 pp.; viii, 376 pp.; xv, 377-800 pp.; xvi, 422 pp. Three vols. in four. Large 4to, cont. vellum-backed paste-paper boards), contrasting red & green morocco lettering pieces on spines, entirely uncut. Florence: G. Bouchard, 1780. \$6500.00

First edition. "A rare work, of great value on the history of physics in Italy, and indispensable to the historian of physics. It contains reprints of a number of original papers and letters by Galileo and other men of science. Of special value are the illustrations of old physical instruments contained in the work."–Sotheran, *First Supp.*, 3882. Riccardi, who describes this work as "eruditissima raccolta" devotes seven columns to a detailed account of the contents of these volumes. Vol. I is devoted to the physical sciences, the second to mathematics, and the third to the natural and medical sciences.

Targioni-Tozzetti (1712-83), was the most active Italian naturalist of the 18th century after Spallanzani. He was one of the first to cultivate the history of science and the present work is his most notable contribution to this new discipline.

Fine set and rare on the market. Armorial bookplate of William Henry Fitton, M.D. (1780–1861), the geologist, in each volume. For his considerable contributions to geology, see *D.S.B.*, V, pp. 13-15.

& Carli & Favaro 573. D.S.B., XIII, pp. 257-58. Riccardi, II, 548-55.

Telford's Autobiography

86. TELFORD, Thomas. *Life of Thomas Telford, Civil Engineer, written by Himself; containing a Descriptive Narrative of his Professional Labours*...Edited by John Rickman...with a Preface, Supplement, Annotations, and Index. Large atlas vol.: engraved frontis. port. of Telford & 82 engraved plates (some folding, some double-page). 2 printed leaves of title & list of plates. Text: one engraved plate & illus. in the text. xxiv, 719 pp. Thick 4to. Two vols., orig. cloth, each volume with attractive new calf spines & corners. London: Payne & Foss, 1838.

\$8500.00

First edition and a very nice example of this magnificent book. "Telford was one of the greatest of the early civil engineers and famous for his canals and roads and for his aqueducts and bridges. Many of his works were on a hitherto unprecedented scale and he also played a major role in the developing use of cast iron for bridge construction. The present autobiography is the best source of information on his achievements. It contains copies of the reports, surveys, letters, specifications, agreements and experiments for all his major schemes. These include the Caledonian and Götha (Sweden) ship canals, the Birmingham & Liverpool Junction canal and the Ellesmere Canal with its extraordinary cast-iron aqueduct at Pont-y-cysyllte as well as such splendid bridges as the suspension bridge with its then unprecedented span which took the Holyhead Road over the Menai Strait, the beautiful Conway suspension bridge or the fine cast-iron bridge at Galton which crossed over his own massive cutting for the Birmingham Canal. All these are magnificently illustrated in the accompanying folio atlas, both in section and elevation, and in many cases details of construction together with the machinery and tools employed are also shown. The book was in preparation at Telford's death and was completed by his friend, John Rickman, who had been Secretary to the Commission on the Caledonian Canal."-Elton, Cat. 15, 93.

A handsome set. Bookplate in text volume of George Giles and with a letter tipped-in presenting this work to him. Stamp in gilt on upper cover of the atlas volume of the Institution of Civil Engineers. Ex Bibliotheca Mechanica.

> Skempton 1556.

An 18th-Century Woman Chemist

87. [THIROUX D'ARCONVILLE, Marie Geneviève Charlotte Darlus]. Essai pour servir à l'Histoire de la Putréfaction. Par le Traducteur des Leçons de Chymie de M. Shaw... Ten folding printed tables. 3 p.l., xlviii, 578, [5] pp. 8vo, cont. polished calf, triple gilt fillet round sides, gilt fleurons in each corner, spine gilt, contrasting leather lettering piece on

spine, a.e.g. Paris: P.F. Didot le jeune, 1766.

\$4000.00

First edition and a very lovely copy of this scarce chemical book written by a woman. "An interesting work, of chemical importance, describing a series of experiments on putrefaction and fermentation. It is divided into thirty-two classes of substances — animal, vegetable, and mineral — with details on the experiments, results, and observations. The author, Mme. D'Arconville (1720-1805), wife of a member of the Paris Parliament and president of one of the chambers, was a remarkable woman in her pursuit of knowledge in the sciences. She studied physics, chemistry, and natural history and attended lectures at the Jardin du Roi. Her home was open to frequent visits by leading French scientists: Macquer, Jussieu, Lavoisier, Fourcroy, Sage, et al. She produced a large literary output, including a translation of Peter Shaw's *Lectures on Chemistry*, and the present work, which is based on her own research. Very rare."–Neville, II, p. 545.

Madame Thiroux wrote numerous others books, all anonymously.

Very fine and fresh copy.

№ Hoefer, Vol. 45, cols. 204-05.

A Fine Copy

88. THURNEISSER ZUM THURN, Leonhard. [In Hebrew]: *Melitsath Kai Hermeneia, Das ist, ein Onomasticum und Interpretatio oder aussführliche Erklerung...uber Etliche frembde und (bey vielen hochgelarten, die der Lateinischen and Griechischen Sprach erfahren) unbekante Nomina, Verba, Proverbia, Dicta, Sylben, Caracter, and sonst Reden. Deren nicht allein in des theuren Philosophi und Medici Aurelii, Theophrasti, Paracelsi von Hohenheim, Sondern auch in anderer Authorum Schrifften...hin zusammen, nach dem Alphabet verzeichnet. Das Ander theil.* Title within elaborate woodcut border, woodcut port. of the author on verso, & eight double-page woodcut tables (two tables with outer margins shaved). Title printed in red & black. 6 p.l., 188 pp. Folio, cont. limp vellum (reusing an old antiphonal). Berlin, N. Voltz, 1583. \$9500.00

First edition of the *Melisath*, "a kind of dictionary directed to clarifying the works and ideas of Paracelsus, whose follower Thurneisser purported to be."–*D.S.B.*, XIII p. 397. The *Melisath* is a continuation of Thurneisser's *Hermenia*, published in 8vo in 1574.

Very handsomely printed, the *Melisath* contains a large number of quotations from a work entitled *Carboantes* by Paracelsus, unknown to earlier and contemporary authors, with the exception of Valentius de Retiis. Sudhoff discusses this at some length, questioning the authenticity of these references, without coming to any conclusion.

At the end of the *Melisath* are bound in two double-page tables illustrated with fine figurative woodcuts, intended to be put together, and six double-page

alphabetic tables within woodcut borders. These tables seem to be lacking in most copies. They are, however, essential to the completeness of this dictionary, containing phonetic equivalents in the scripts of Greek, Latin, Hebrew, Abyssinian, Syriac, Arabic, Armenian, Dalmatian, Russian, Georgian, Old Egyptian, Indian, Persian, and Turkish, with hints on pronunciation. In explanation of the rarity of copies with these tables, Sudhoff suggests they might have been obtainable separately. They are, however, referred to at the end of Thurneisser's preface, and form an integral part of the work.

Thurneisser (1530?-96), born in Basel, was one of the most remarkable men (and charlatans) of his century. He travelled in England, France, Bohemia, Hungary, Italy, Spain, and North Africa acquainting himself with metallurgical practices and methods. "In 1571 he settled at Frankfurt on the Oder, where he published his book Pison (1572), in which he states that the waters of the Spree carry gold. This attracted the attention of the Elector of Brandenburg, who made Thurneisser his physician. He cured the wife of the Elector, and in his laboratory in Berlin he made cosmetics, potable gold, tincture of rubies, amulets and talismans, which he sold at high prices. He taught boys chemistry for high fees, and practised astrology. His household now contained 200 persons and he became very wealthy. He had his own press in Berlin...He established or reorganized alum and saltpetre works and, in order to obtain apparatus, introduced improvements in glass factories. He so contributed to the development of chemical industry in Brandenburg and he attracted many clever artisans to Berlin. In this way he certainly laid the foundations of the chemical industry in Prussia."-Partington, II, pp. 152-53.

Fine copy. There is much printing with exotic typefaces.

▶ Durling 4355–(apparently without the tables). Duveen p. 579–(lacking the tables). Ferguson, II, pp. 450-53–(no copy in Young collection). Sudhoff 194.

Cinnabar

89. TILING, Mathias. *Cinnabaris Mineralis, seu, Minii naturalis Scrutinium Physico-Medico-Chymicum, ad normam & formam Sacri Romani Imperii Academiae Naturae Curiosorum directum.* Title printed in red & black. 6 p.l., 250 pp. 8vo, attractive calf-backed speckled boards, spine gilt, red morocco lettering piece on spine. Frankfurt am Main: J.G. Seyler, 1681. \$4500.00

First edition of this "comprehensive treatise on mineral cinnabar or natural minium (mercuric sulphide, HgS). Tiling (or Tilling, 1634-1686), an iatrochemist and professor of medicine at the University of Rinteln, in forty chapters describes the locations where cinnabar is mined, its history, its physical and chemical properties, and its uses in pharmacy. He documents the work with references to Agricola, Aldrovandi, Dioscorides, Matthiolus, Pliny, Theophrastos, et al. Tiling states that cinnabar is composed of mercury and sulphur (p. 48) and

discourses on its use in the preparation of medicines when mixed with 'sanguis draconis' (dragon's blood), which is the gum resin secreted by fruits of East Indian palms. Cinnabar was used as a treatment for syphilis until the nineteenth century but is no longer employed owing to its significant toxicity."–Neville, II, p. 556.

Fine copy from the Solms ducal library at Lich.

▶ Partington, II, p. 319. Schuh, *Mineralogy & Crystallography: A Biobibliography*, 1469 to 1920, 4636–"rare." Thorndike, VIII, p. 373. Waring, p. 497.

"A Very Valuable Swedish Catalogue"

90. UNIVERSITET BIBLIOTEK, UPPSALA. *Catalogus Librorum Impressorum Bibliothecae Regiae Academiae Upsaliensis*. [Compiled by Pehr Fabian Aurivillius]. Engraved vignette on first title. 1 p.l., lxviii, 530 pp.; 1 p.l., 531-1040 pp.; 2 p.l., 384 pp. Three parts bound in two vols. Large 4to, cont. boards (first & last leaves somewhat foxed), handwritten paper labels on spines. Uppsala: Stenhammar & Palmblad, 1814. \$2650.00

The first general catalogue of the Library of Uppsala University (founded in 1477), the most important library in Scandinavia; this catalogue is still considered to be useful. It is one of the major institutional catalogues of the period 1740–1840.

"A very valuable Swedish catalogue [the present catalogue] published at the same time as the British Museum catalogue that I have just discussed also throws some light on the popularity of catalogues as reference works...The alphabetical section entitled 'Catalogi librorum' in the Sectio posterior (pp. 87-100) is apparently a full list of the book catalogues of private libraries, public libraries, and dealers owned by the university library...Such a record is very valuable, especially for the rare Swedish catalogues that it includes. It gives one the impression that the librarian put on his shelves the catalogues that fell into his hands. These were chiefly Swedish and German in origin."–Taylor, *Book Catalogues*, p. 112–(& see pp. 47 & 113).

In the preliminary leaves of Vol. I, Aurivillius (1756-1829), director of the Library for 42 years, provides a valuable and detailed history of the Library.

Minor foxing but a fine set. This set comes from the Aurivillius family. Scarce. Peignot, pp. 69-70.

Excellent Evidence

91. URE, Andrew. A Dictionary of Arts, Manufactures, and Mines: containing a Clear Exposition of their Principles and Practice. 1241 woodcut diagrams in the text. vii, [1], 1334 pp. Thick 8vo, cont. polished calf,

double gilt fillet round sides, spine richly gilt, green morocco lettering piece on spine. London: Longman et al., 1839. \$2500.00

First edition and a very attractive copy of this invaluable work which gives us some of the best evidence we have of the actual state of chemical technology of the time. Ure (1778-1857), was a pioneer in the teaching of science to artisans and this is his chief work on the subject. Some of the subjects covered include assaying, bleaching, brewing, calico printing, ceramics, firearms, fireworks, gas lighting, glassmaking, gunpowder, metallurgy, perfumery, photography, silk manufacture, ventilation, and winemaking.

"This is the first edition of Ure's work on commercial processes and related materials. The author draws on his long experience as a professor of practical science and as a consultant to manufacturers both in Great Britain and abroad to prepare a work useful to manufacturers, metallurgists, merchants, students and the general public."–Cole 1301.

There are also very substantial sections on papermaking, dyeing, and tobacco. Fine copy. Bookplate of Sir Hector Livingston Duff. There were many later editions.

Hoover 800. Partington, III, pp. 722-73.

"Our Greatest Geometer, the New Archimedes of Our Age"-Galileo

92. VALERIO, Luca. *De Centro Gravitatis Solidorum Libri Tres*. Large woodcut printer's device on title & numerous woodcut diagrams in the text. 4 p.l., 80, 92, 94 pp. 4to, modern blindstamped calf (tear to title carefully repaired without loss, two small holes to title, minor browning). Rome: B. Bonfadini, 1604.

[bound & issued with]:

—. Quadratura Parabolae per simplex falsum. Et altera quàm secunda Archimedis expeditior ad Martium Columnam. Woodcut diagrams in the text. 20, 23 pp. (Part II bound before Part I). 4to (some marginal worming carefully filled in, light browning). Rome: L. Facius, 1606. \$12,500.00

First editions; these are rare and important books which had a considerable influence on Galileo and his studies on motion.

Valerio (1552-1618), who had studied under Clavius, met Galileo in Pisa in 1590 and influenced him to renew his studies on the centers of gravity. In 1609 they began an extensive correspondence on problems of motion and mathematics. It was during this time that Galileo was preparing his treatise on motion and mechanics which later became the *Discorsi* of 1638. "In December 1612, having completed his *Sunspot Letters*, Galileo considered having the Linceans print his work on centers of gravity of paraboloids, probably in the form of a letter to Luca Valerio. Ensuing correspondence shows that he sent this to Cesi, who in discussing the matter with Valerio found that he was then revising his own book on a similar subject, published in 1603-4. Galileo accordingly gracefully withdrew his work from publication at this time, for which Valerio expressed his gratitude. In fact Valerio did not reprint his book, and Galileo eventually placed his investigations of centers of gravity in an appendix to his own last book in 1638."–Drake, *Galileo at Work*, p. 202.

Valerio's influence on Galileo, through his correspondence and these two books, was enormous, and he was singled out for praise in the *Discorsi*; where he is described as "our greatest geometer, the New Archimedes of our age." This was high praise indeed, for Valerio was critical of Galileo's Copernicanism and had been expelled from the Accademia dei Lincei in 1616 for his views.

"Valerio's *De centro gravitatis* consists of the application of Archimedean methods to the determination of the volumes and centers of gravity of the various solids of rotation and their segments...Among the mathematicians who studied him and spoke highly of him were Cavalieri, Torricelli, and J. C. de la Faille. He also had a direct influence on Guldin, Gregorius Saint Vincent, and Tacquet."–*D.S.B.*, XIII, pp. 560-61.

Good copies. Ex Bibliotheca Mechanica.

✤ M.E. Baron, *The Origins of the Infinitesimal Calculus*, pp. 101-03. Riccardi, II, 570–"Raro e pregiato." Roberts & Trent, *Bibliotheca Mechanica*, pp. 332-33.

A Rare Elizabethan Book of Secrets; How to Illuminate MSS.

93. **A VERY PROPER TREATISE**, wherein is breefely set foorth the art of Limming, which teacheth the order in drawing and tracing of leters, Vinets, Flowers, Armes, and Imagerye, and the maner how to make sundry syses or groundes to lay Silver or Gold upon, and how silver or Golde shall be layed or limmed upon the syse, and the waye to temper Gold and Silver and other mettals and diverse kindes of colours to write or to limme withall uppon Velym, Parchment or Paper, and how to lay them uppon the worke which thou intendest to make, and how to vernish it when thou hast done, with divers other thinges verye meete and necessary to be knowne to all such Gentlemen, and other persons as doe delight in Limming, painting or in tricking of Armes in their colours, and therefore a woorke very meete to be adjoyning to the bookes of Armes. Typographical device on title. Printed throughout in black letter. 11, [1] leaves. Small 4to, fine modern blue morocco, dentelles gilt, a.e.g. London: T. Purfoote, the assigne of R. Tottill, 1588. \$22.500.00

Fourth edition of one of the earliest English books of "secrets," or manual of practical arts; this text appears to be entirely of English origins. It was first published in 1573 and reprinted in 1581 and 1583; there were also editions of

1596 and 1605. All editions are very scarce; of this printing the NSTC (24255) records five copies: L18, O; F, PN, NY Metropolitan Museum.

This is a very early English manual of instructions for painting and illuminating ("limming," or "limning"), particularly books and manuscripts. The following recipes are characteristic: "to temper golde or silver wherewith you may write with a pen or paint with a pencil"; "to temper Brasill wherewith to write, florish, or rule bookes"; "to make a kind of colouring called vernix, wherewith you may vernish gold, silver, and other colour or paintings, be it upon velim, paper, timber, stone, leade, copper, glasse, &c." The last leaf contains on the recto "the names of all such colours and other thinges as are mentioned and contayned in this present booke of limming, and are for the moste parte to bee solde at the apothecaries," and on the verso is an index to the various recipes.

A fine copy. Books of this sort are perishable by nature and copies seldom appear on the market; many of those which do survive in institutional libraries are in less than perfect condition.

Monumental Bibliography of Surgery

94. VIGILIIS VON CREUTZENFELD, Stephan Hieronymus de. Bibliotheca Chirurgica in qua Res Omnes ad Chirurgiam pertinentes Ordine Alphabetico, ipsi vero Scriptores, quotquot ad Annum usque MDCCLXXIX. Innotuerunt, ad Singulas Materias Ordine Chronologico exhibentur, adjecto ad Libri calcem Auctorum Indice. xxx, 864 pp.; 1 p.1., 865-1914, [2] pp. Two vols. Large thick 4to, cont. half-sheep & marbled boards (minor wear). Vienna: JT. Trattner, 1781. \$3250.00

First edition. "De Vigiliis von Creutzenfeld...issued at Vienna in 1781 an extraordinary two-volume surgical bibliography which ran to some 1,914 pages. The subject arrangement which he adopted was based on a relatively simple and well-thought-out scheme, with adequate cross references, the scheme being indicated at the beginning of the first volume in the subject conspectus. His last main section, 'Vulnera capitis,' gives a masterly survey of the literature bearing on head injuries from Hippocrates down to William Dease's well-known book on the subject published in London in 1776. This section occupies fifty pages of text and is undoubtedly the most complete bibliographical study of the literature of head injury that had been brought together up to that time. All of the main works receive detailed annotation after the style of Haller. If anyone were to compile a history of ideas concerning head injury, de Vigiliis would be an absolutely invaluable source book...

"De Vigiliis must have had access to unusual library facilities, for he includes literature from almost every country in Europe and is especially strong in the sphere of English writers such as Percival Pott and William Dease...De Vigiliis' section on the hernia literature runs to fifty-six pages and is particularly helpful in connection with classical writers."–Fulton, *The Great Medical Bibliographers*, pp. 61-62.

Very good set. Lacking the frontispiece portrait in Vol. I as is very often the case.

≈ Hirsch, V, p. 756. Petzholdt, p. 592.

Very Scarce

95. [WATSON, James]. *The History of the Art of Printing, Containing an Account of It's Invention and Progress in Europe: with the Names of the Famous Printers, the Places of their Birth, and the Works printed by Them. And a Preface by the Publisher to the Printers in Scotland.* One folding sheet of woodcut printer's ornaments & numerous specimens of type in the text. Title printed in red & black. 24, xlviii, 64 pp. Small 8vo, mid-18th cent. calf (upper joint cracked but strong, head & foot of spine a bit chipped, two small wormholes affecting most leaves with hole in title repaired), sides with a gilt roll-tool border, spine lettered in gilt. Edinburgh: Printed by James Watson, 1713.

First edition and very scarce. The first 24 pages contain Watson's preface addressed to the printers of Scotland, containing important details of printing practice and conditions in the British Isles. Much of this information is not found elsewhere. The second section — "Specimen of Types in the Printing-House of James Watson" — includes the very rare folding sheet of vignettes, head- and tailpieces. The third section is an English translation and abridgement of Jean de la Caille's *Histoire de l'Imprimerie* (Paris: 1689).

A very good and complete copy. Preserved in a slipcase. From the famous typographical library of Jackson Burke, with his bookplate.

Bigmore & Wyman, III, pp. 67-68. See Lawrence Wroth's *Corpus Typographicum* for a discussion of Watson's *History*.

96. [WELLING, Georg von]....*Opus Mago-Cabalisticum et Theologicum. Vom Uhrsprung und Erzeugung des Saltzes, Dessen Natur und Eigenschafft, wie auch dessen Nutz und Gebrauch...*Alles auffgesetzt und zusammen getragen von...Gregorius Anglus Sallwigt. Ten engraved plates (four are printed on rectos & versos of two sheets, the six others are folding & printed on six sheets). 4 p.l., 80 pp. Small folio, cont. half-sheep & speckled boards (extremities with minor wear), spine gilt. Frankfurt am

Main: A. Heinscheidt, 1719.

First edition and a handsome copy. Welling (1655-1727), "a man of great learning but very superstitious who wrote under the pseudonym of Gregorius Anglus Sallwigt, directed mines and construction in Baden-Durlach and leaned toward a cabalistic interpretation of chemical and mineral phenomena...Goethe studied this book intensively."–Hoover 872.

The text has much Hebrew printing and in the margins there are many alchemical and chemical symbols. There is much on the origins and nature of salt.

Fine copy, a duplicate from the Bayerische Staatsbibliothek in Munich with their discrete stamp on second leaf of the prelims and on the versos of folding plates.

🏽 Mellon 150.

The Theory of the Origin of Ore Deposits; The Solms Copy

97. WERNER, Abraham Gottlob. *Neue Theorie von der Entstehung der Gänge, mit Anwendung auf den Bergbau besonders den freibergischen.* xxxx, 256 pp. 8vo, cont. half-sheep & paste-paper boards, red morocco lettering piece on spine. Freiberg: Gerlach, 1791. \$2500.00

First edition. This work by Werner, who is known as the father of historical geology, describes his "theory of the origin of ore deposits which would be consistent with his general theory of the origin of the earth's crust...Many of its elements were of lasting value. Werner formulated basic questions about the origin and history of veins and their contents, established criteria for determining the relative age of veins and vein materials, and presented a comparative study of the structure of veins and rock masses...Perhaps the most important contribution of *Von den Entstehung der Gänge*, however, was that it made the study of vein formation an integral part of historical geology."–*D.S.B.*, XIV, pp. 262-63.

Fine copy. Stamp of "Furstl. Solms Braunfels Hofbibliothek" on title. Hoover 878.

An Ambitious Engineering Project with an Important Contribution by Boscovich

98. [XIMENES, Leonardo]. *Piano di Operazioni Idrauliche per ottenere la Massima Depressione del Lago di Sesto, o sia di Bientina*. Finely engraved title & five folding engraved plates. 1 p.l. (engraved title), x, 347 pp. Large 4to, cont. mottled sheep (extremities a little worn & rubbed), spine gilt,

62

contrasting leather lettering piece on spine. Lucca: F. Bonsignori, 1782. \$2500.00

First edition of this beautifully produced book printed on thick paper; it is a plan for an ambitious project of civil engineering and land reclamation. Lake Sesto (also known as Lake Bientina) posed a problem for the nearby town of Lucca in Tuscany as it was a large reservoir of stagnant water which caused numerous epidemics of malaria. Ximenes' solution was to drain the lake and reclaim the land by cutting a new channel, the "Nuovo Ozzeri," in addition to the existing Canale d'Ozzeri. The handsome engraved title-page shows two former fisherman carrying their boat away from a field now being ploughed.

Ximenes has included on pages 175-205 the comments on his plan by Roger Joseph Boscovich ("Riflessioni sulla Relazioni del Sig. Abate Ximenes appartenente al Progetto di un Nuovo Ozzeri...") and an examination of it by Eustachio Zanotti ("Esame del Progetto del Novo Ozzeri") on pages 209-39. On pages 243-347 Ximenes provides his reply to both.

Ximenes (1716-86), a Jesuit born in Sicily, became an ardent student of the sciences and made rapid progress in mathematics and geography. He was given the title of "mathematician to the Emperor," and held the chair of geography at the Academy of Florence. He wrote extensively on hydraulics, astronomy, and mechanics.

One of the plates is a long extending cross-section of the Nuovo Ozzeri. Ximenes' plan was not put into effect, however, and the area surrounding Lucca continued to be malaria-infected marshland until the mid-19th century.

Fine copy. Small gilt stamp of John Phillips Bodenhausen at foot of upper cover.

Packed with Scientific Firsts

99. YOUNG, Thomas. *A Course of Lectures on Natural Philosophy and the Mechanical Arts.* 58 plates (two are finely & brilliantly hand-colored) & diagrams in the text. xxiv, 796 pp.; xii, [iv], 738 pp. Two vols. Large 4to, cont. olive half-calf & marbled boards (minor foxing), spines gilt. London: J. Johnson, 1807. \$7500.00

First edition, and a very lovely copy, of this important book, containing Young's significant writings on optics, mechanics, hydrodynamics, physics, astronomy, the tides, etc., etc., etc. It is a course of lectures covering virtually the whole of theoretical science and technology.

It includes his completed undulatory theory of light, with a description of his experimental demonstration of interference. In the lecture "On Collision" he was probably the first to use the term "energy," and in another lecture he defined a "modulus of elasticity" (Young's modulus). The second volume includes a bibliography of some 20,000 references (which was omitted from the second

edition and has never been reprinted), and reprints of his classic papers from the *Philosophical Transactions*, in which he established the wave theory of light and discovered the principle of light interference, gave the first description of astigmatism, and in general established the principles of physiological optics (see Garrison-Morton 1486-88).

"Young made many discoveries in natural philosophy and physiological optics...he is most famous, however, for his attempt to win acceptance for an undulatory theory of light."–*D.S.B.*, XIV, pp. 562-72.

This is the nicest set of this great book I have seen for many years.

▶ Roberts & Trent, *Bibliotheca Mechanica*, p. 367–(giving a very full account of the contents of these two vols.).

100. ZAPF, Georg Wilhelm. Augsburgs Buchdruckergeschichte nebst den Jahrbüchern derselben. Eight engraved plates (several folding). 8 p.l., xlviii, 220 pp.; 4 p.l., xvi, 263, 15 pp. Two parts in one vol. Large 4to, cont. boards (some wear to extremities, occasional staining). Augsburg: C.F. Bürglen, 1786 [Part I]; C.H. Stage, 1791 [Part II]. \$450.00

First edition of this valuable bibliography of early Augsburg imprints up to 1530. Good copy.

Bigmore & Wyman, III, p. 111.