

[28, 29] CATALOG OF THE ROYAL SCHOOL OF MINES,
PARIS

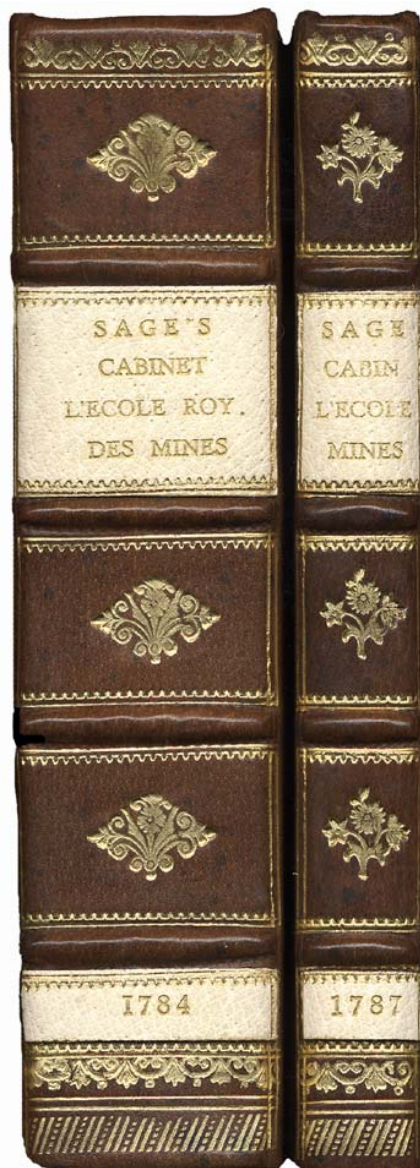
SAGE, B. G. (1784) *Description Méthodique du Cabinet de l'École Royale des Mines*. Published in Paris by the Royal House.

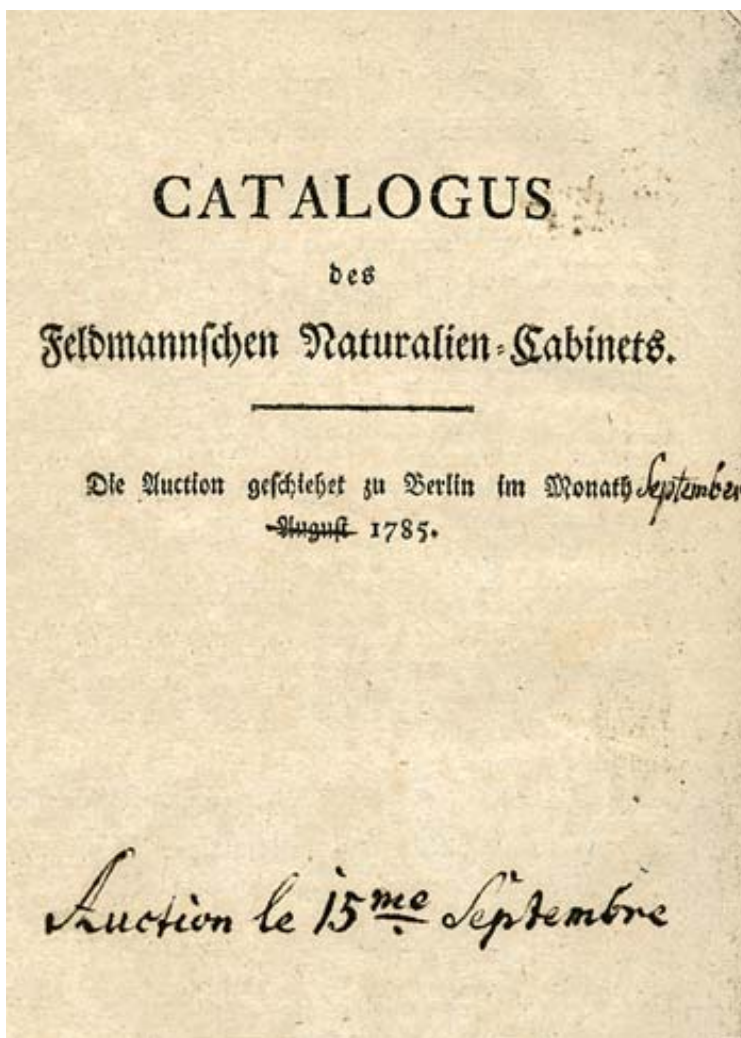
SAGE, B. G. (1787) *Supplément à la Description Méthodique du Cabinet de l'École Royale des Mines*. Published in Paris by the Royal House.

Balthazar Georges Sage (1740-1824) was a Parisian mineralogist and chemist who rose to prominence despite rather scant competence in those fields. He taught chemical analysis at the Paris Mint, and was one of the founders of the Royal School of Mines in Paris, where he assembled a mineral collection which he claimed to be among the most “complete” in the world. The various species were arranged according to their chemical properties and reaction under the blowpipe, as an aid in the analysis of unknowns. A translation of the first paragraph of his introduction reads as follows:

The study of minerals can only be accomplished with the aid of carefully selected specimens, well-characterized and analyzed so as to be assigned their correct place. To give a methodical description of one of the most complete collections of ores in Europe, each accompanied by associated test results which are the product of twenty-five years of work, is to produce a work which will establish the knowledge of

mineralogy to an ever-increasing degree. It is necessary to note that what this collection contains has become a national monument, since Mr. de la Boullaye, to which the King entrusted the general intendance of the mines, then general controller of finances, has acquired this cabinet to be used for the instruction of the pupils of the Royal School of the Mines, created in 1783, by Mr. Joly de Fleury. This collection offers the whole of the mineral productions of almost all the earth; I have endeavored to compose it only of those species which are best characterized, rejecting the sterile varieties for instruction. This cabinet is systematically arranged in the order of the text on experimental chemistry which I intend to publish.





Half-title page of Feldmann's 1785 catalog,
show a change of auction date from
August to September 15th.

[30] CATALOG OF BERNARD FELDMANN
(1701-1777)

FELDMANN, B. (1785) *Verzeichniss des von dem zu Neu-Ruppin verstor-benen Doctore und Creysz=Physiko Feldmann nachgelassen Naturalien= Cabinets...* Published in Berlin by Friedrich Rellstab.

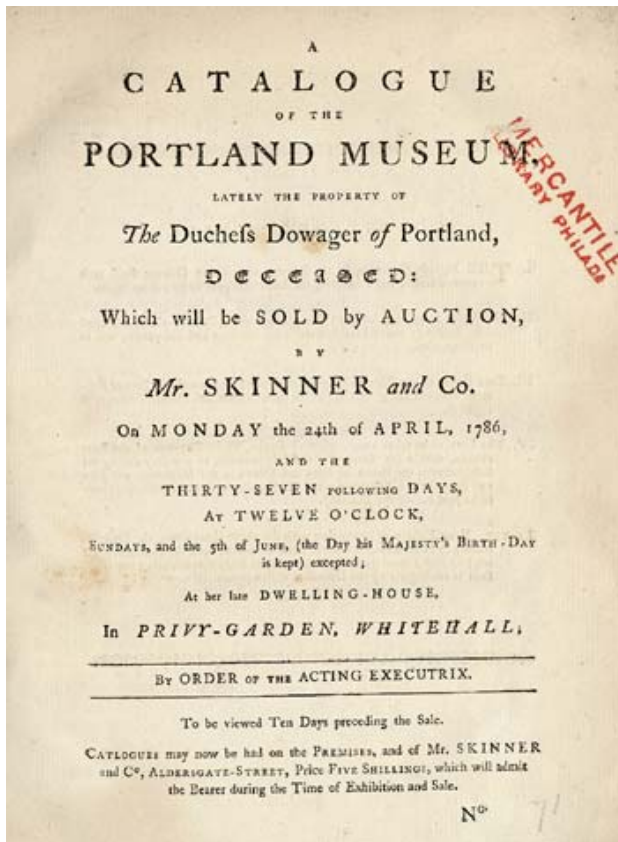
Bernard Feldmann, a German physician and naturalist, was born in Köln and eventually settled in the town of Neu Ruppin, Germany. He had taken anatomy in Berlin, and then in Leyden where he met the great collector Albert Seba while studying under Hermann Boerhaave. During this time he developed an interest in natural history and collecting which persisted until his death

in 1777. He built a substantial natural history collection consisting almost entirely of seashells and minerals.

His son apparently inherited his collections, and put his manuscript catalog in order for eventual publication in conjunction with its auction; he also wrote the foreword to his catalog, dating it May 1, 1785 in Berlin, and seemed quite knowledgeable and enthusiastic about the collection. He listed extensive corrections and additions to the catalog that had been prepared by his father, and urged interested readers to send any further corrections or comments to him at the Feldmann Commissarium in Berlin or to Bürgermeister Göring in Neu Ruppin. The auction of the collection, to be conducted by Sieur Böhme, was originally scheduled in Berlin for some time in August of 1785, but a handwritten correction shows that it was moved back to September 15.

The collection itself was impressive: approximately 9,000 shells, finished and polished; 1,200 mineral specimens in 566 lots, including 340 pieces of amber; 3,000 rock specimens and petrifications; over 2,000 polished rock slabs, and a small number of miscellaneous curiosities.

This is an extremely rare catalog, so much so that in 17 years of research on this subject for my monograph on the history of mineral collecting I never came across any mention of it in any bibliography or in any library index.



**Margaret Cavendish, Duchess
of Portland (1715-1785)**

[31, 32] CATALOGS OF THE DUCHESS OF PORTLAND (1715-1785)

LIGHTFOOT, J. (1786) *A Catalogue of the Portland Museum, lately the property of the Duchess Dowager of Portland, Deceased.* Published in London by the auction house of Skinner and Company.

Bound with:

LIGHTFOOT, J. (1786) *A Marked Catalogue containing the Lots, what each respectively sold for, and the Names of the Purchasers of the four thousand two hundred and sixty-three lots which constituted the Portland Museum; late the property of the Duchess Dowager of Portland, Deceased, which was sold by auction by Mr. Skinner and Co., on Monday the 24th of April, 1786, and the thirty-eight following days, Enabling every Connoisseur to know among whom these valuable Curiosities are distributed, and the sum which every lot produced.* Published in London by Kearsley, Walker, Sewell, Flexney, Robson and Egerton.

WALPOLE, Horace (1936) *The Dutchess of Portland's Museum.* With an Introduction by W. S. Lewis. New York, the Grolier Club, xii, 15 (2).

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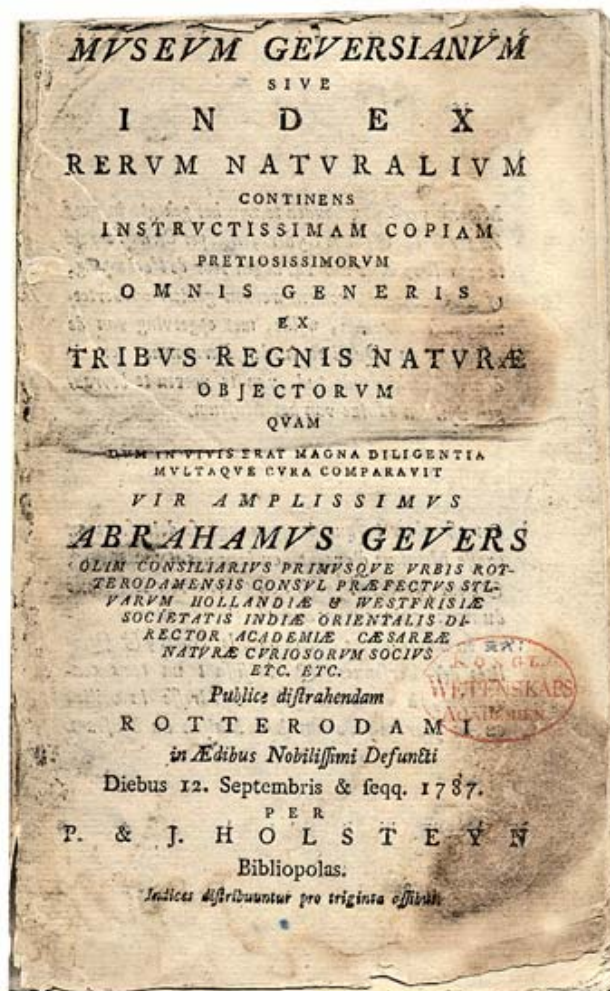
The Duchess Dowager of Portland was Margaret Cavendish Holles Harley Bentinck (1715-1785). Her collections of seashells and minerals were nationally known. Following her death, a portion of her extensive collections went to her son, the third Duke of Portland, and the remainder, 4,156 lots (including some minerals listed as “from the Arundel collection”), was cataloged for auction by her personal librarian, John Lightfoot (1735-1788), a naturalist, author and botanist in his own right. The auction was held in her home in Privy-Garden, Whitehall; it began April 24, 1786 and continued for 39 days, realizing a total of £11,546.

Not only does the copy illustrated here have the hammer price and purchaser handwritten in a fine hand beside each lot, but also a separately published list of prices and buyers. In fact, the correlation between the handwritten notes and the published notes is so precise and complete as to suggest that the handwritten copy may be the actual auction bid book.

Purchasers of the mineral specimens included Mrs. [Jacob] Forster, [Emmanuel Mendez] da Costa, Murry, Dennis, Hamlin, [George] Humphreys, [Daniel] Boulter, Dawl, Slay, Walker, Willis, Wilkinson, Ross, Keate, Shaw, Cotton, Bell, Stevens, Tyson, Wood, Bugden, Watson, Budgen, Cummins, Griffin and Edwin, with many lots simply marked as sold for cash, presumably by buyers unknown to the auctioneers, who were not running a tab but paying individually. The biggest buyer by far was George Humphrey (ca. 1739-1826), a collector, mineral dealer and brother-in-law of the prominent mineral dealer Adolarius Jacob Forster. Humphrey had sold his own collection in 1779 and was clearly either building a new one or building his dealer stock. Perhaps the next most successful bidder was Humphrey’s sister Elizabeth, wife of mineral dealer Adolarius Jacob Forster (1739-1806); she operated the family business successfully during her husband’s long travels in search of specimens.

A slim volume (one of 450 copies printed) on the Dutchess of Portland’s Museum was published in 1936 by the Grolier Club in New York. It was sponsored as a gift by the Club and Mr. Wilmarth Sheldon Lewis of Farmington, Connecticut, who conceived the idea, edited the text, supervised the printing and wrote the Introduction. “In an age of great collectors,” Lewis wrote, “she [the Dutches] revalled the greatest.” He notes that her natural history specimens “occupied ninety percent of the items in the auction held after her death by ‘Mr. Skinner and Co. on Monday the 24th of April, 1786, and the thirty-seven following days.’”

The Dutchess’s friend, Horace Walpole (1717-1797), attended the sale and made purchases. He wrote up several pages of background on the Dutchess and her collections, which he had bound into his personal copy of the sale catalog, eventually acquired by W. S. Lewis. This text was reprinted in the Grolier Club edition. In it we learn, for example, that although the Dutchess became interested in natural history rather late in life, she eventually spent over £15,000 on specimens—in a day when the average annual salary for a working man was less than £100. Her entire collection, however, brought just £10,965 at auction.

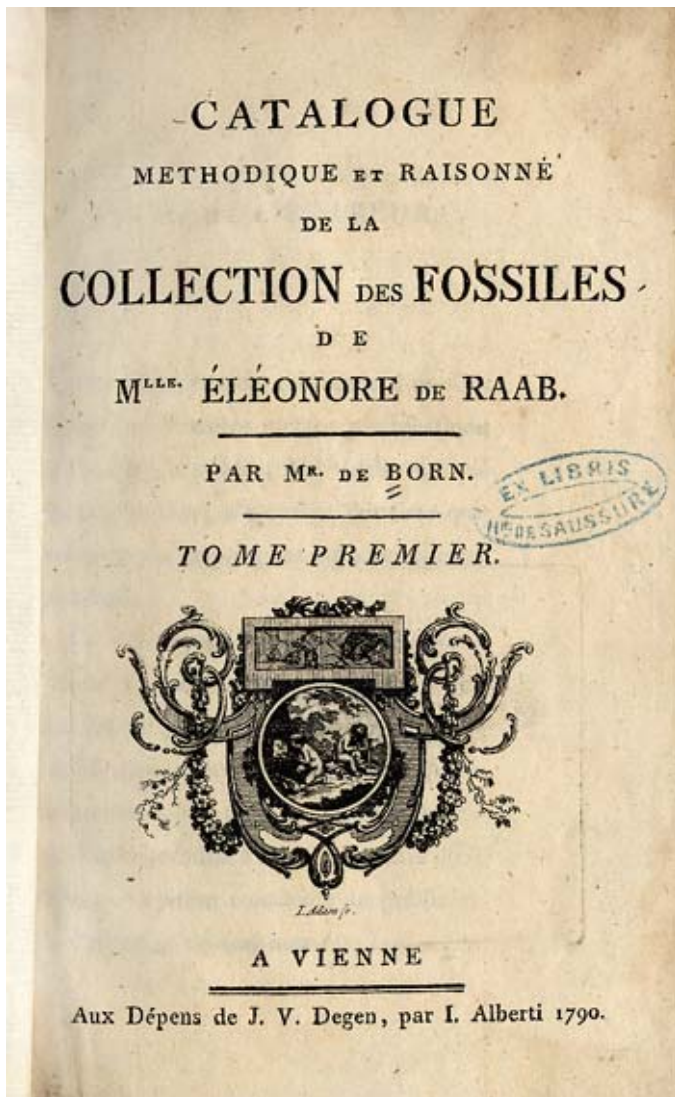


[33] CATALOG OF ABRAHAM GEVERS
(1712-1780)

MEUSCHEN, C. F. (1787) *Museum Geversianum sive Index Rerum Naturalium continens instructissimam copiam pretiosissimorum Omnis Generis et Tribus Regnis Naturae objectorum...* Published in Rotterdam by P. & J. Holsteyn.

Abraham Gevers, son of a prominent Dutch family, was the Burgomaster of Rotterdam and a Magistrate for Holland and West Frisia, as well as Director of the Society of the East Indies and a member of the Royal Natural History Society and other organizations. He built an extensive natural history collection, including minerals, which was considered to be one of the finest in the Netherlands. It is said that he lined the drawers of his cabinet with blue silk to better show off his specimens.

His very rare auction catalog, published seven years after his death, runs to 655 pages. The mineralogy section, arranged according to the system of Wallerius, lists 636 lots in parallel columns of Latin and French, followed by 204 lots of petrifications. The descriptions include habit, locality and associated species, plus a reference, usually to Wallerius.

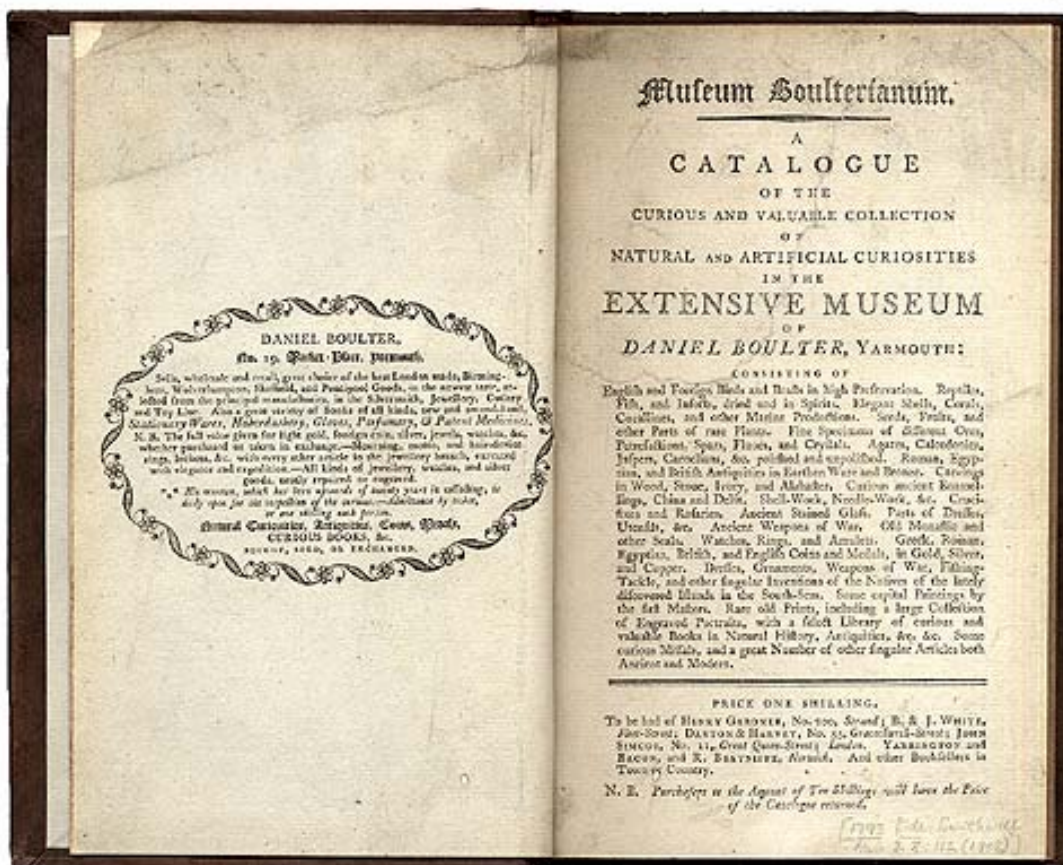


[34] CATALOG OF ELEONORE DERAAAB
(1741-1793?)

BORN, I. E. von (1790) *Catalogue Methodique et Raisonné de la Collection des Fossiles de Mlle. Éléonore de Raab*. Published in Vienna by J. V. Degen.

Eleonore de Raab, daughter of Bartholomeus Raab and later the wife of Friedrich von Uberta of Austria, became an enthusiastic mineral collector in her youth through the influence of her scholarly mentor, Ignaz von Born. With his help she formed a beautiful mineral collection consisting of about 2,500 small, carefully chosen specimens, many of which were gifts from Born. In 1793, two years after Born's death, her collection was sold to Count Moritz von Friess in Vienna.

Only 70 copies of this catalog were printed; the one shown here is from the library of Born's friend, Horace Bénédicte de Saussure (1740-1799), a well-known mineralogist, collector and author in Geneva.



[35] CATALOG OF DANIEL BOULTER
(1740-1802)

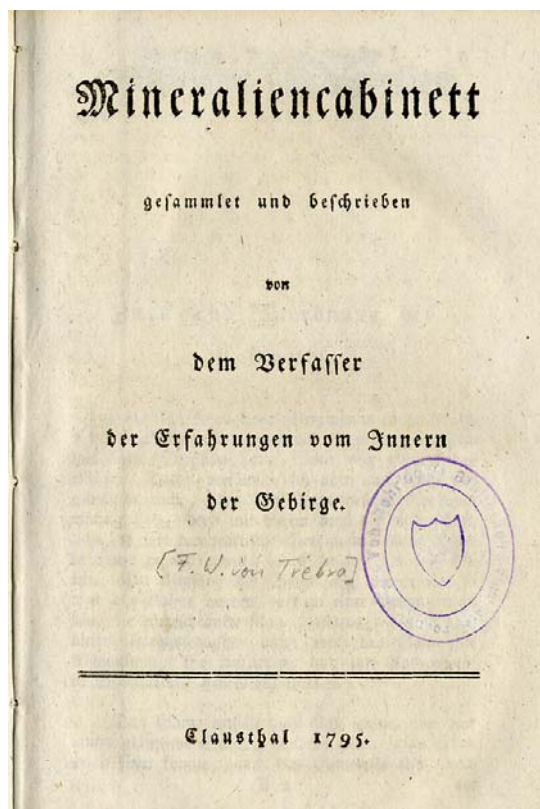
BOULTER, D. (1793) *Museum Boulterianum; A Catalogue of the Curious and Valuable Collection of Natural and Artificial Curiosities in the Extensive Museum of Daniel Boulter, Yarmouth*. Published in London by Gardner.

Daniel Boulter, one of the purchasers at the Portland auction, was a successful merchant located at No. 19, Market-Place, Yarmouth. He made his living dealing in silverware, cutlery, jewelry, toys, books, stationery, haberdashery, perfume, patent medicines, gloves, watch repair, coins, medals, antiquities and natural curiosities including mineral specimens. Judging by his product lines, one might almost conclude that he ran a small department store. Beginning around 1773 he built an extensive museum of curiosities, which was open to the public for an admission fee of one shilling. Every item in the Museum was for sale, and the fixed prices were indicated in his published catalog. Visitors who made purchases of 10 shillings or more received a refund on the 1-shilling price of the catalog.

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In 1794 he sold his shop to his brother Joseph and turned over his museum to his nephew John Boulter. In 1802 John had a copper cupola built over the museum which survived until the building was demolished in 1927.

It is always interesting to examine specimen prices in the early literature, though converting to modern currency is problematic. I like to base a conversion on the equivalent amount of gold in early coinage vs. the price of gold today. Using this method, some of Boulter's specimens were priced in today's dollars as follows:

- A very fine specimen of violet cubic fluors from Cumberland, \$70
- A fine, transparent, hexagonal, columnar, pointed rock crystal from the Brasils, \$100
- A fine specimen of clear, white, tabular barytes from Alston-Moor, Cumberland, \$28
- A fine specimen of amber-colored tabular barytes from the Dofton mine, Westmoreland, very scarce, \$100
- A fine specimen of native gold intermixed with crystallized quartz, Transylvania, rare, \$100
- A fine specimen of iron ore [hematite] in flat tabular crystals resembling a cluster of precious stones, from the Island of Elba, \$70
- A rare species of crystallized antimony [stibnite?] with transparent crystallized blende [sphalerite] and white rock crystals, Cornwall, very rare, \$24
- Fine specimen of beautiful peacock marcasites, Cornwall, \$35
- Black crystallized tin or [cassiterite], Cornwall, \$5
- Native or virgin copper, Cornwall, \$14



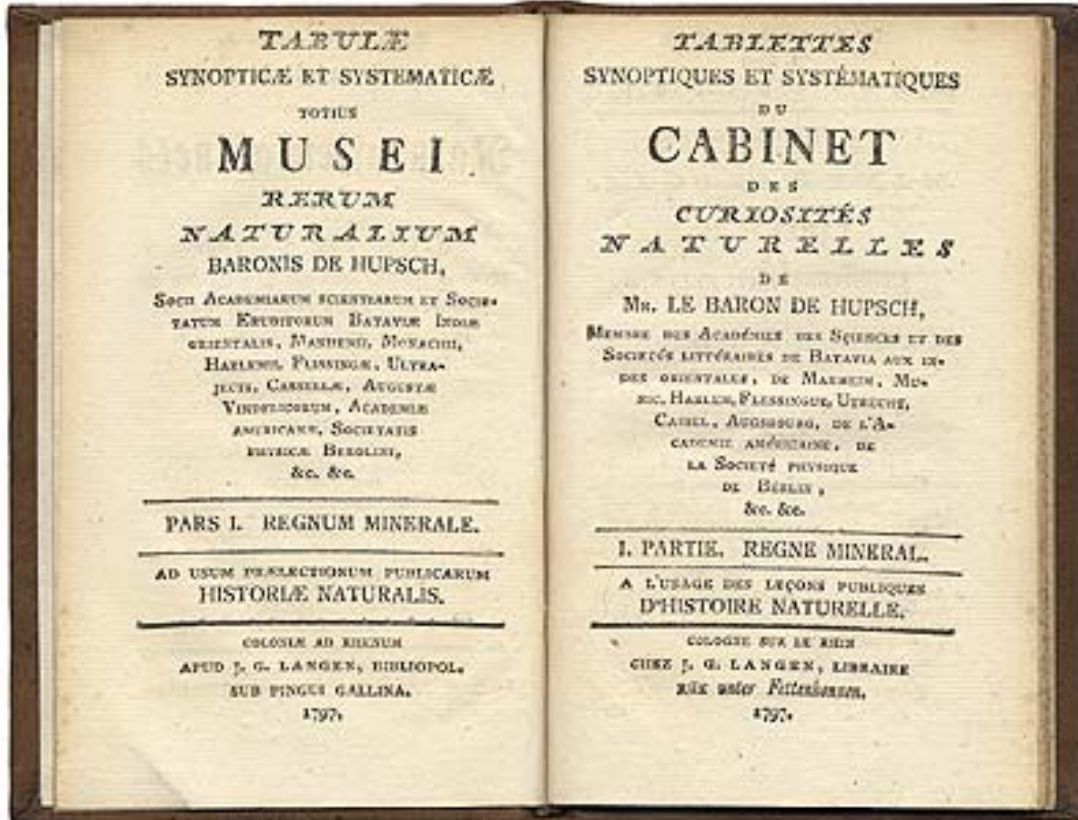
[36] CATALOG OF FRIEDRICH WILHELM VON TREBRA (1740-1819)

TREBRA, F. W. von (1795) *Mineral-iencabinett gesammelt und beschrieben von dem Verfasser der Erfahrungen vom Innern der Gebirge*. Published in Clausthal.

Trebra was a German mining geologist and the Government's Chief Inspector of Mines in Saxony. His mineral collection was self-collected in the various Saxon mines which he oversaw, and housed in a large and beautifully ornate cabinet depicted in a handsome fold-out engraving in his catalog. In 1785 he wrote a book detailing his "Experiences in the Interiors of Mountains" which was much admired, and was so well-known by 1795 that he did not sign his name to his catalog, but instead identified himself simply as the author of *Erfahrungen vom Innern der Gebirge*. The 1795 catalog was his first, followed by a second issue in 1797, and another edition for auction purposes in 1822, after his death.

Trebra's catalog would be of some interest to modern collectors were it not so difficult to read in the old German fraktur typeface. He is fairly meticulous about identifying the many old mines he visited and the ores he found there. His text also keys the specimens described to their location within his pictured cabinet.

The copy of Trebra's catalog shown here is in such perfect condition that one is tempted to conclude that it had been hermetically sealed in a nitrogen-filled bottle for the last 200 years.

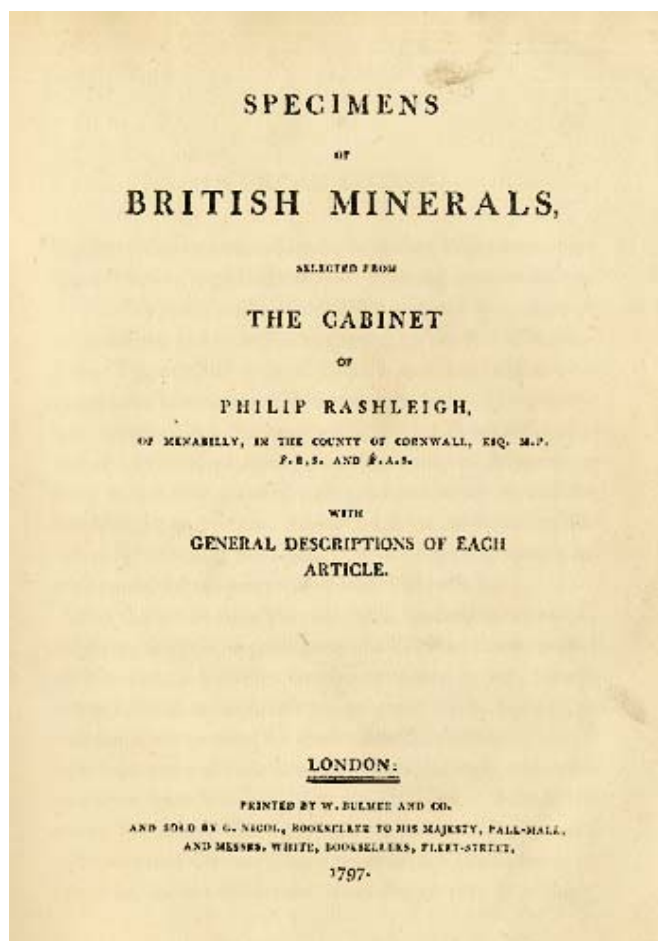


[37] CATALOG OF JEAN HONVLEZ,
ALIAS BARON VON HÜPSCH (1730-1805)

HÜPSCH, Freiherr von (1797) *Synoptische und systematische Tabellen des ganzen Naturalienkabinetts des Freih. von Hüpsch. I. Theil. Mineralreich.* Published in Köln by J. G. Langen.

Jean Guillaume Fiacre Honvlez was a French dealer in natural history specimens and antiquities in Köln. He felt that in order to sell his wares effectively to the aristocratic classes who were the principal collectors in those days, he needed to sound like he was one of them. Consequently he took an alias for business purposes, calling himself “Johann Wilhelm Karl Adolph, Baron von Hüpsch, Herr zu Lontzen, zu Krickelhausen und auf der Motte.” He claimed membership in a variety of scientific societies, many of them imaginary though impressive sounding, including “the Academies of Science and the Literary Academies of Batavia in the East Indies, of Mannheim, Munich, Harlem, Flessingue, Utrecht, Cassel, Augsburg, the American Academy, the Physical Society of Berlin, &c. &c.” How many people accepted this deception at face value is unknown, but he was successful and built a substantial personal collection of minerals.

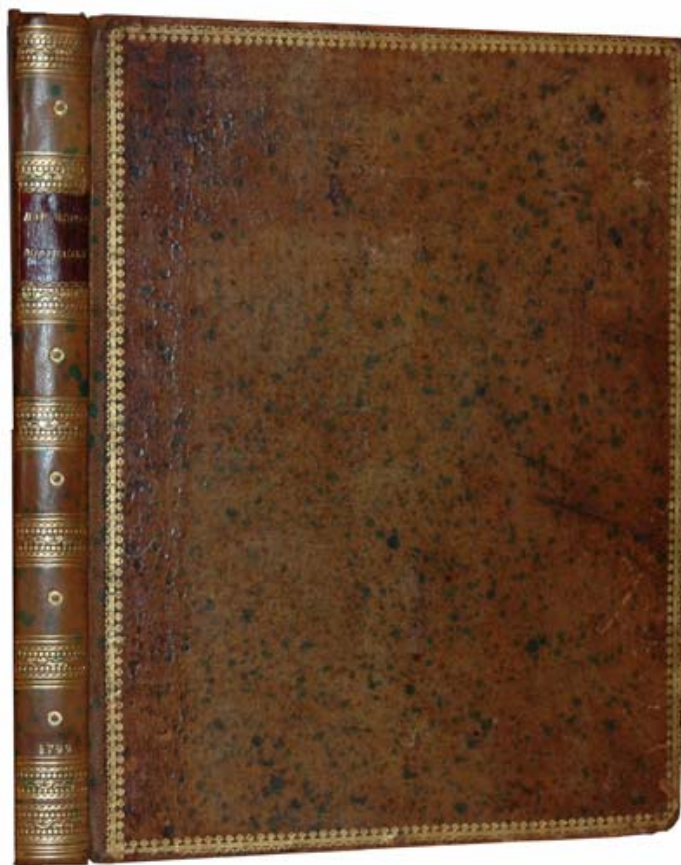
His catalog carries duplicate title pages in German, Latin and French, followed by a tabular arrangement for his minerals and some concluding explanatory text at the end. The copy pictured here is in fresh, perfect condition.



[38] CATALOG OF PHILIP RASHLEIGH (1729-1811)

RASHLEIGH, P. (1797, 1802) *Specimens of British Minerals selected from the Cabinet of Phillip Rashleigh of Menabilly, in the County of Cornwall, Esq. M. P., F. R. S., and F. A. S., with general description of each article.* Two volumes, Published in London by Bulmer and Nicol.

Philip Rashleigh, perhaps England's most famous early mineral collector, published two handsome volumes of handcolored engravings of specimens in his collection. These volumes are treasured today by collectors of colorplate books, and by those interested in British mineralogy, history and localities, though it must be said that Rashleigh's mineralogical knowledge was virtually nil, and thus his so-called descriptions tell nothing more than could be seen by a cursory examination of the plates themselves. Nevertheless, he had the finely tuned instincts of a connoisseur collector, and managed to assemble one of the most outstanding collections of his day, and probably the finest collection of Cornish minerals ever brought together by a private individual. The excellent renderings in his catalog are the work of three artists, Henry Bone, Thomas Medland and Richard Underwood. The reader interested in learning more is directed Bob Jones' in-depth article in the "Mineral Books" issue of the *Mineralogical Record* (vol. 26, no. 4), and also my "History of Mineral Collecting" (vol. 25, no.6).

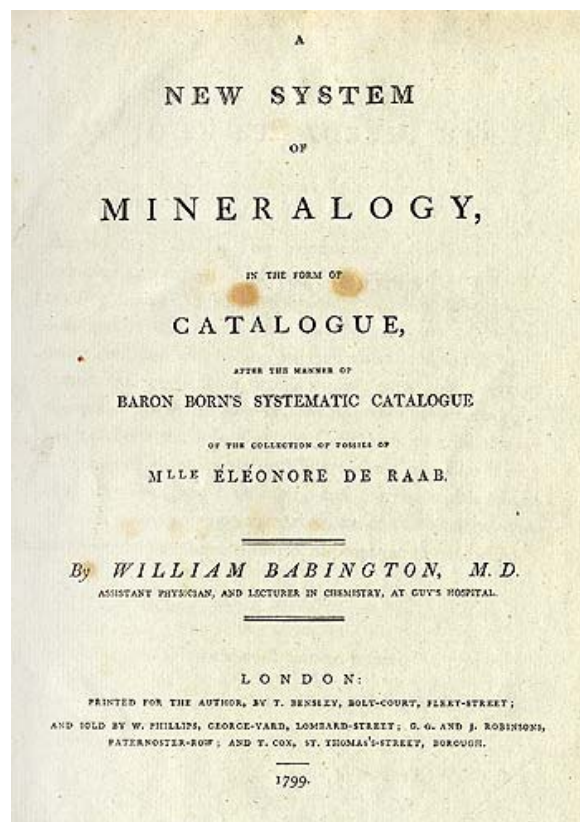


[39, 40] CATALOG OF WILLIAM BABINGTON
(1757-1833)

BABINGTON, W. (1796) *A Systematic Arrangement of Minerals, founded on the joint consideration of their chemical, physical and external characters; reduced to the form of tables*. Published in London by T. Cox.

BABINGTON, W. (1799) *A New System of Mineralogy, in the form of a Catalogue, after the manner of Baron Born's Systematic Catalogue of the collection of fossils of Mlle Éléonore de Raab*. Published in London by T. Bensley.

William Babington was an Irish physician and mineralogist who, in 1793, purchased much of the enormous mineral collection of John Stuart, the Third Earl of Bute (1713-1792). It was reputed to have contained as many as 100,000 mineral specimens, making it one of the largest such collections in history. Bute had retained Babington for several years as his personal curator. When the Earl died his collection was put up for auction, and Babington, thanks to his familiarity with the collection, was no doubt able to focus on acquiring the best specimens, perhaps with an eye to reselling them later.



Babington's 1796 catalog is really just an outline for arranging the collection. Babington was a great admirer of Ignaz von Born, and of the catalog that Born had prepared in 1790 for Mlle. Éléonore de Raab in Vienna, so he patterned his arrangement of the collection and its catalog on that model. He writes in the introduction:

The contents of the following pages were not originally intended to be made public. They were compiled merely for the author's own use, while employed in arranging a cabinet selected from the very extensive Collection of Minerals which he had an opportunity of purchasing a few years ago. ...As no endeavor has been spared to render the Collection from which this synopsis was drawn up, one of the most perfect in a scientific point of view, the annexed Catalogue will afford, to such as have advanced a considerable way in the business of collecting, an opportunity of determining the comparative value of what they already possess, as well as what articles may yet be wanting to make their cabinets more complete.

Though not overt, such statements were certainly good advertising and good salesmanship. By 1799 Babington had sold the entire collection to Sir John St. Aubyn (1758-1839), but had also greatly expanded his outline into a fully realized descriptive catalog which he published in that year, probably with St. Aubyn's backing. In the dedication he thanks St. Aubyn for giving him continued access to the collection following the sale, and in the introduction he acknowledges his debt to Born regarding the systematic arrangement, to Romé de l'Isle as his "guide on the subject of crystallization," to Widenmann and Emmerling for the generic descriptions, and to Kirwan for the chemical properties and analyses. Each specimen in the collection is assigned a systematic number, is carefully described, and its locality given. This is our only hint as to the high quality of the Bute collection, and a great many of the pieces, as described, sound excellent indeed. Both of these catalogs are very rare on the market.

A
SYSTEMATIC ARRANGEMENT
OF
MINERALS,

FOUNDED ON THE
JOINT CONSIDERATION
OF THEIR

CHEMICAL, PHYSICAL, AND EXTERNAL
CHARACTERS;

REDUCED TO THE FORM OF TABLES,

AND EXHIBITING

THE ANALYSIS OF SUCH SPECIES AS HAVE HITHERTO BEEN MADE
THE SUBJECT OF EXPERIMENT.

By *WILLIAM BABINGTON, M. D.*

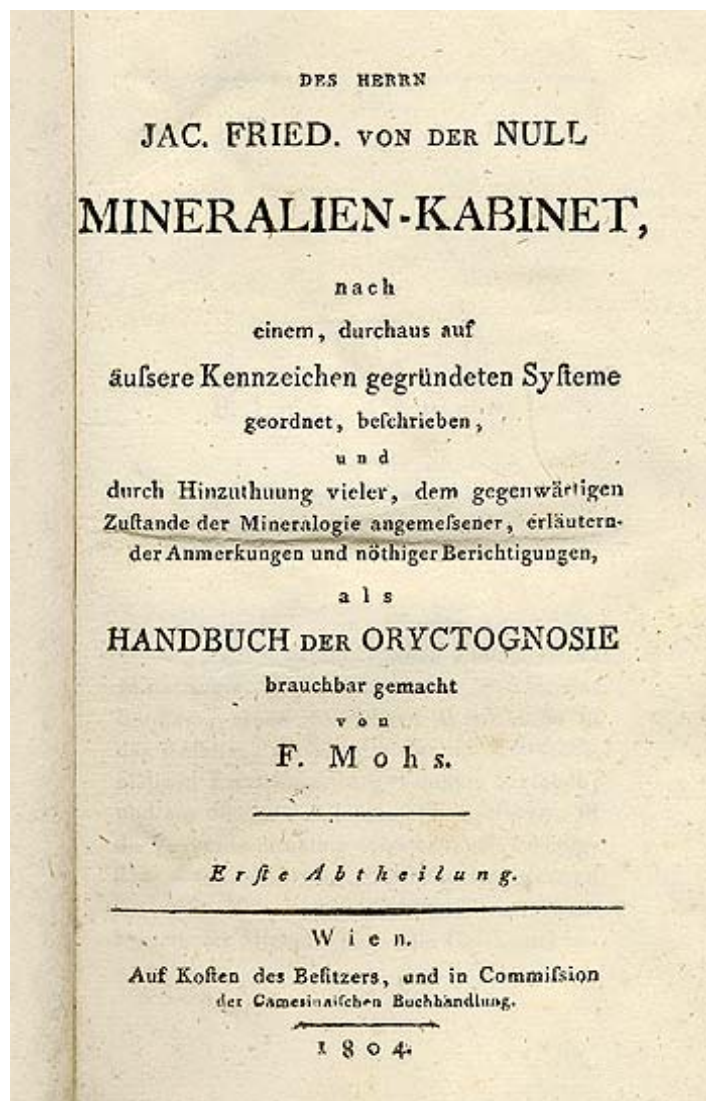
LECTURER IN CHEMISTRY, AND ASSISTANT PHYSICIAN AT GUY'S HOSPITAL.

SECOND EDITION.

LONDON:

PRINTED FOR T. COX, AT HIS MEDICAL LIBRARY, ST. THOMAS'S-STREET, BOROUGH
AND SOLD BY G. G. AND J. ROBINSONS, PATERNOSTER-ROW;
J. JOHNSON, ST. PAUL'S CHURCH-YARD; AND MURRAY AND HIGHLY, FLEET-STREET.

1796.



[41] CATALOG OF JACOB FRIEDRICH VON DER NULL
(D. 1826?)

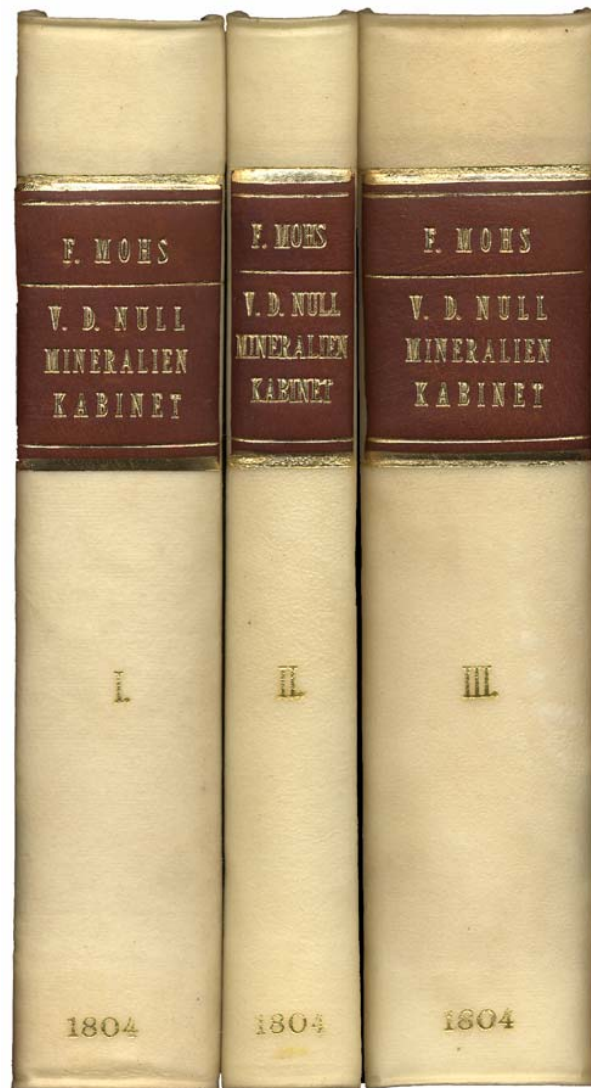
MOHS, F. (1804) *Des Herrn Jac. Fried. von der Null Mineralien-Kabinet...als Handbuch der Oryctognosie*. Three volumes, published in Vienna “at the expense of the owner.”

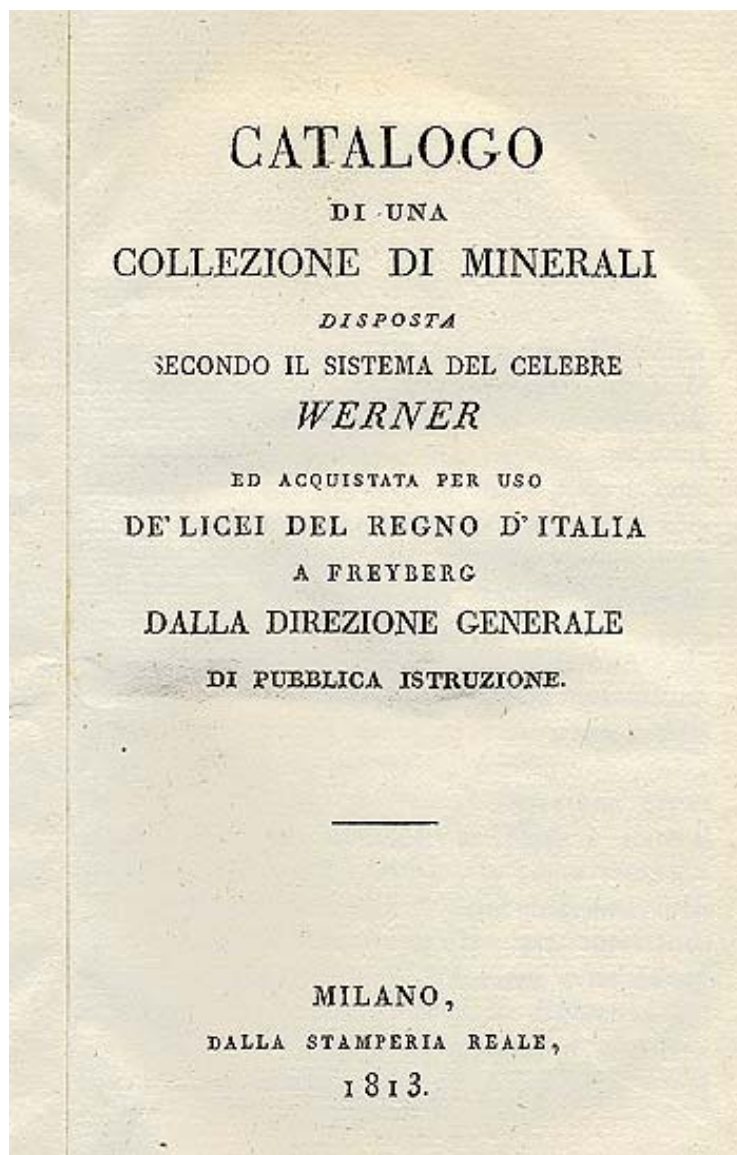
Von der Null (actually van der Nüll) was a wealthy Austrian banker and businessman in Vienna. He built an exceptionally large and fine collection with the help of his personal curator, the well-known mineralogist Friedrich Mohs. One authority pronounced it “not only the best private collection in Vienna, but in all of Germany as well, and technically the most instructive.” His collection of what we would call small-cabinet-size specimens (2 to 4 inches) was begun in 1797 and had achieved major status within just three years. Null took the fast track to collection building, purchasing no less than eleven major mineral collections from other collectors within a ten-year period. Approximately 4,000 of his specimens are described in his scholarly three-volume catalog of 1804, although unfortunately it contains no plates or illustrations.

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Mohs (1773-1839), who was one of Abraham Werner's outstanding students, applied his knowledge of systematic mineralogy to the formation of the collection and the organization of the catalog, which consequently was of such high quality that it could double as an instructional handbook of mineralogy. Mohs, however, had doubts about Werner's preferred system, first expressed in the Null catalog, and later went on to formulate his own system.

The Null catalog is among the most important of all early mineral collection catalogs, but it is very rare on the market today. All three of the volumes from the set illustrated here are from the first edition, first issue, of 1804, and have been beautifully bound in white vellum.





[42] MINERAL COLLECTION ASSEMBLED FOR
THE LYCEUM OF MILAN

MALACARNE, G. C. (1813) *Catalogo di una Collezione di Minerali disposta Secondo il Sistema del Celebre Werner, ed acquistata per uso de' Licei del Regno d'Italia a Freyberg dalla Direzione Generale di Pubblica Istruzione*, Milano, dalla Stamperia Reale, 316 pages.

Abraham Gottlob Werner (1749-1817), Professor of Mineralogy and Mining at the Freiberg Mining Academy, was among the most famous mineralogists of his day, and the founder of a widely used system of classification for minerals. At the request of the Italian Government, Werner (who was also curator of the Academy mineral collection) assembled a teaching

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collection of 462 mineral specimens. A catalog was prepared in Italian for the collection, utilizing the classification system of Werner. The title in English would be: “Catalogue of a Collection of Minerals arranged According to the System of the Celebrated Werner at Freyberg, and acquired for use of the Lyceum of the Kingdom of Italy by the Director General's Office of Public Education.”

A *Liceo* (“Lyceum”) was and still is a college-preparatory high school with a five-year program. The *Regno d'Italia* (Kingdom of Italy) no longer exist, but the Liceo is still an important part of the Italian education system. Like American “magnet schools,” a *Liceo Scientifico* has more of a math and science-oriented curriculum, whereas a *Liceo Classico* also teaches Greek, with more emphasis on art, history and philosophy.

In 1813 Northern Italy was under Emperor Napoleon and was therefore well under the influence of the new enlightened thinking that attached much importance to science. In that spirit the General Director of the School System promoted the purchase of mineral collections to be used as teaching aids. These collections, which also included wooden crystal models and other classroom equipment, were purchased from the countries that were more advanced in mineralogy (especially Germany—Freiberg being the main source, but probably also France). The catalogs of these collections, usually written in German or French, would then become a sort of textbook for teaching mineralogy. This catalog, however, was written in Italian and included cross-references to the German and French terms.

It is not clear from the text which particular *Liceo* received this collection (there were several in Milan). It is possible that the collection was divided up among more than one school, all of which used the catalog as a textbook. The title states that the collection was arranged accordance to the system of Werner, but not necessarily by Werner himself. The introduction reveals that the book was written by “an expert amateur in the natural sciences, previously a professor for many years, in one of our public education establishments.” There appears to be no solid documentation as to who the “expert amateur” was. However, various booksellers’ catalogs attribute authorship to G. C. Malacarne, based on the name found on the spine of a particular leatherbound copy. A Giuseppe Claro Malacarne (1777-1828) wrote books on shells, snails and chemistry, so it is probable that he is the author.



[43] CATALOG OF ÉTIENNE GILBERT,
MARQUIS DE DRÉE (1760-1848)

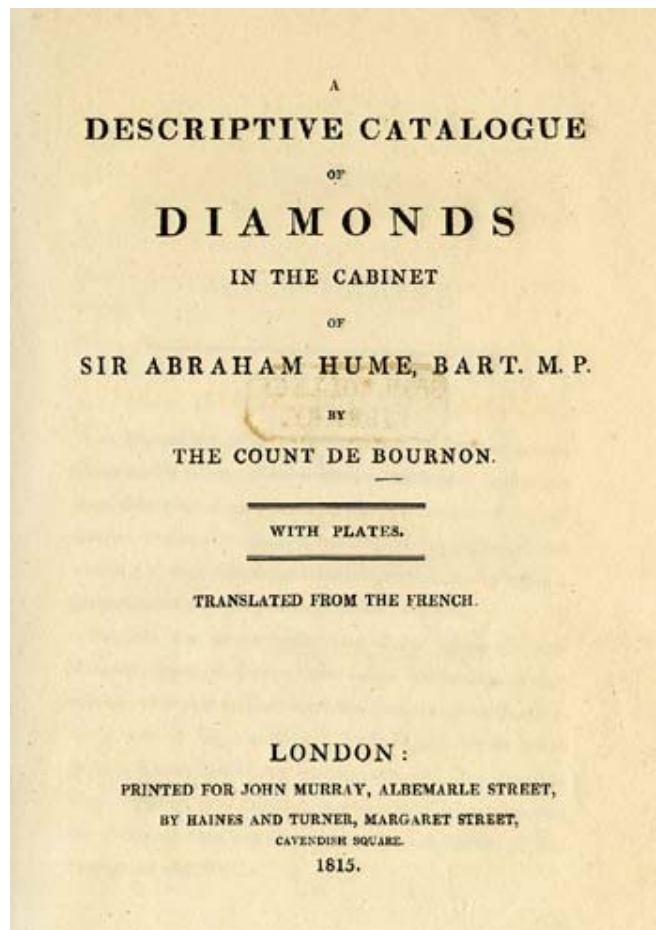
DRÉE, E. G. (1814) *Catalogue des Objets Rares et Précieux formant les huit collections,,qui composent le Musée Minéralogique de M. Le Marquis de Drée.* Published in Paris by Paillet and Léman.

The Marquis de Drée was a French nobleman and brother of the famous French geologist Deodat Dolomieu. He is known to have purchased some of the mineral collection of Baron Philippe Joubert, who was executed during the French Revolution in 1792. Drée published his first collection catalog in 1811, and expanded upon it in an edition of 1814. An auction catalog was published by Lacoste in 1816, and another in 1826. Drée apparently built collections to sell, and did so repeatedly. His 1826 collection was purchased in its entirety by the British mineral dealer

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J. Henry Heuland. His last and perhaps largest collection was sold to the Paris School of Mines in 1845 for 215,000 francs; it included at least eight major collections which Drée had purchased since 1826.

The rare 1814 catalog, the one owned by the Record Library, contains chapters on minerals, rocks, volcanic products, organic fossils, polished rock plates, marble statuary, engraved gems and agates, and fine gemstones. An introductory note to the mineralogy section (in French, translated here) reads as follows:

This numerous collection, which is composed of more than eight thousand four hundred and seventy-five species and varieties, is contained either in chests of drawers, or in mahogany and glass showcases. Nine hundred to a thousand specimens are arranged and classified methodically in glass cases, so as to be able to quickly follow the whole of a complete collection of mineralogy. It is classified following the system of the scientist who has extended so far our knowledge of crystallography, Mr. Haüy, with some changes that the current state of the science required. Also included are two series of crystal models, one of wood by Mr. Haüy; and the other of ceramic material by Mr. Romé de l'Isle.



[44] CATALOG OF ABRAHAM HUME
(1749-1838)

BOURNON, J. (1815) *A Descriptive Catalogue of Diamonds in the Cabinet of Sir Abraham Hume*. Published in London by John Murray.

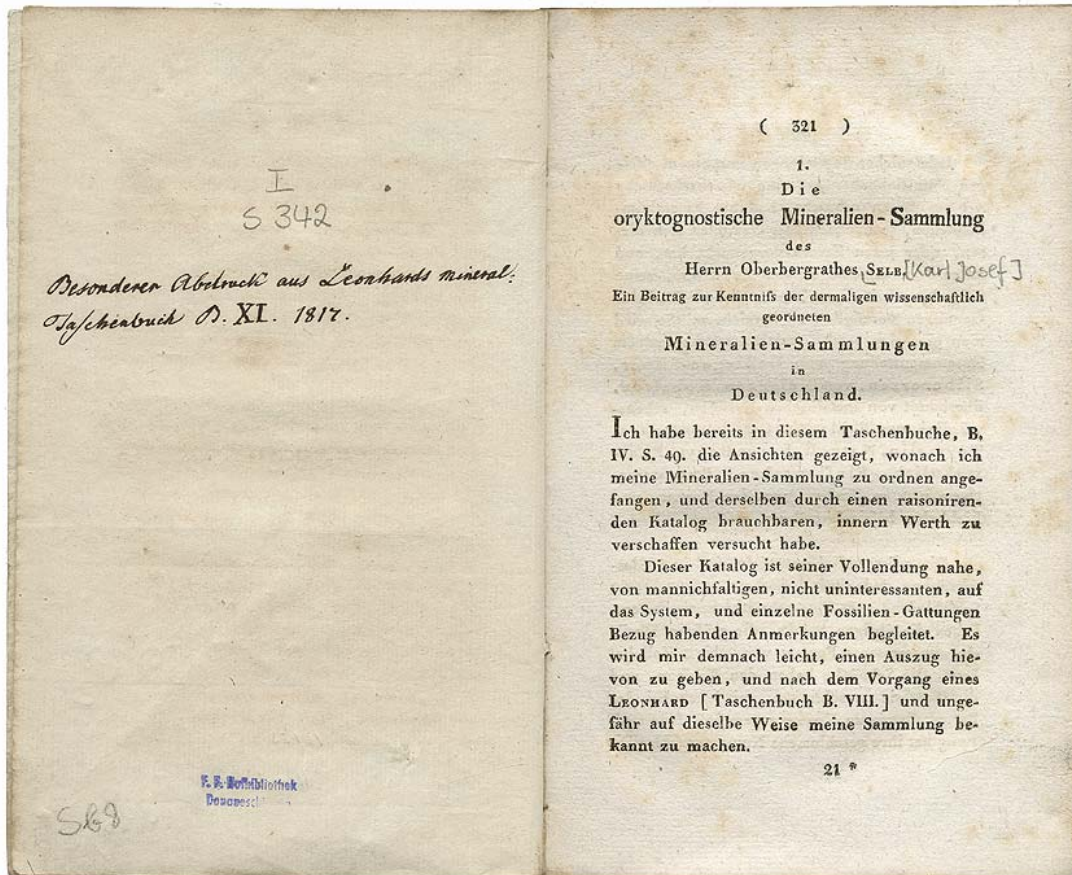
Sir Abraham Hume, along with Sir John St. Aubyn and Charles Greville, supported Count Bournon during his exile in England as a result of the French Revolution. They employed him to curate their mineral collections and, in Hume's case, to also produce a collection catalog focusing on his fine suite of diamond crystals. At that time there was no scholarly work on the mineralogical aspects of diamonds, and it had been only a few years since any quantity of uncut diamonds had reached England for inspection; before that time all rough diamonds had been channeled to the Netherlands and Portugal for cutting. So Bournon's catalog, with angle measurements and 71 engraved drawings of idealized crystals and actual specimens, was an important contribution to the knowledge of diamond morphology.

Actually, Bournon and Hume should be considered as coauthors of the catalog, because it was Hume who wrote the text describing his 107 crystals (signed at the end "A. H.") while Bournon wrote the crystallographic observations (signed "C. de B.") and prepared the angle table and list of forms, based on his own goniometric measurements. The title page is dated 1815, and

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a tipped-in strip states that “The French original of this Catalogue, with the Plates, is also published.” Then, following Hume’s “Advertisement” (Introduction), dated May 1815, is a note from Hume dated January 1816 which reads: “The engraving of the Plates having retarded the publication of this Catalogue for several months, I am enabled by the kindness of Count de Bournon to render it more complete.” So it appears clear from this that they collaborated on it, and that it was actually not published until 1816. Bournon supplies some additional background in his “Letter, &c.” (his own introduction):

You may recollect that my first work on diamonds, of which your collection was the motive and ground-work, happened some time after to be mislaid, and lost. Flattering myself that what had cost me so much pains and trouble might ultimately be recovered, the period arrived when, after twenty-five years of voluntary exile [since 1789] from my unhappy country, my august and legitimate Sovereign was restored to the throne of his ancestors [this took place in 1814, when Louis XVIII was restored as King]. Being, consequently, about to return to France, I felt it impossible for me to quit a friend of twenty years standing [they had met when Bournon came to England in 1794]...without completing the Catalogue of his valuable Collection of Mineralogy, the formation, as well as the superintendance of which had been entrusted to me. I therefore delayed my journey, for the purpose of making a Catalogue of your choice Collection of Diamonds, with drawings of their various forms. This work, however, which, from want of time, I was obliged to do in a hurry, remained incomplete... An event equally unexpected as it has been disastrous and afflicting to humanity [Napoleon’s return from exile in March 1815], having occasioned my return to this happy and hospitable land, I had the satisfaction to find that it was your intention to publish the Catalogue of Diamonds, together with the Plates, and that the descriptive part was already printed.

He then goes on to say that he was happy to have the opportunity to remeasure the crystals and create a more accurate angle table for the catalog. This explains Hume’s statement that the delay in printing the plates allowed time for Bournon to make additional contributions to the work. Bournon then discusses the crystallographic ramifications in some detail, taking issue with Haüy on some points. Then follows his table, and Hume’s description of each of his specimens in some detail, morphologically, but unfortunately without giving any locality data. Probably the information on exactly where each crystal had come from was not maintained by the diamond merchants and was therefore simply unavailable.



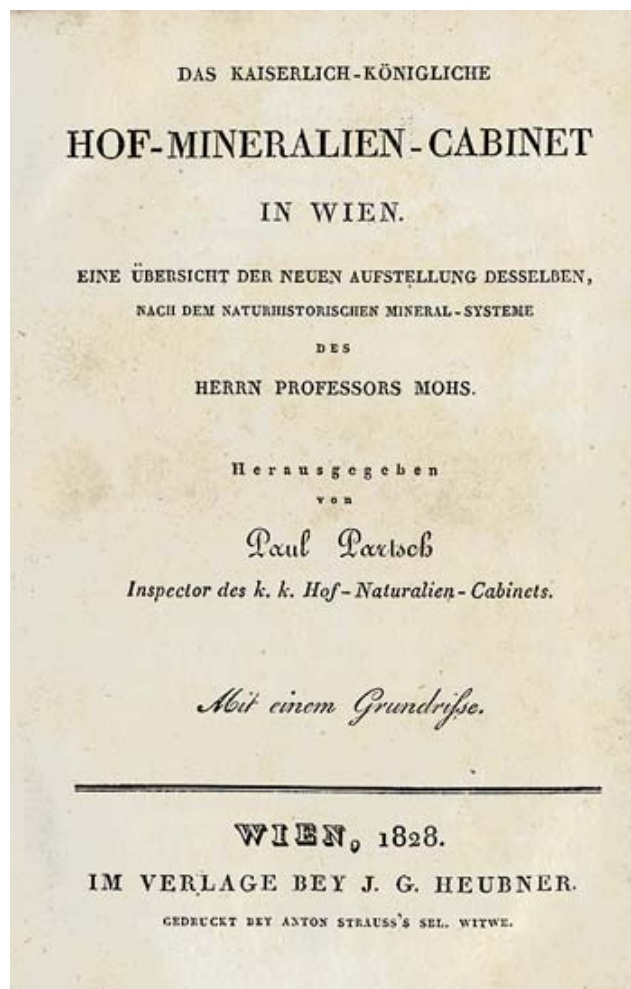
(45) CATALOG OF KARL JOSEF SELB
(1755-1827)

LEONARD, K. C. von (1817) *Die Oryktognostische Mineralien-Sammlung des Herrn Oberbergrathes Selb. Ein Beitrag zur Kenntniss der dermaligen wissenschaftlich geordneten Mineralien-Sammlungen in Deutschland.* Specially printed extract or off-print ["Besonderer Abdruck"], prepared for limited distribution, from *Leonard's Taschenbuch*, vol. XI, p. 321-460.

Selb was Director of the salt works at Dürnheim, and also of the mining operations at Wolfach in Kinzigthal. He co-authored a book of mineralogical studies with Karl Cäsar von Leonard in 1812, and wrote several other books on geology and mining. His large mineral collection, numbering over 3,000 specimens, was described and cataloged by Leonard in order to demonstrate how a mineralogical cabinet should be properly arranged.

Most specimens were in the 2 to 3-inch size range; the larger cabinet specimens were arranged in glass cases, and each piece had a catalog number affixed to an inconspicuous spot on the specimen.

This off-print catalog, which is in fine condition in original marbled boards, is extremely rare, with no other copies known. It was part of the library of Prince Fürstenberg at Donaueschingen, and is signed inside the front cover by Dr. W. A. Rehmann, the Fürstenberg family physician.



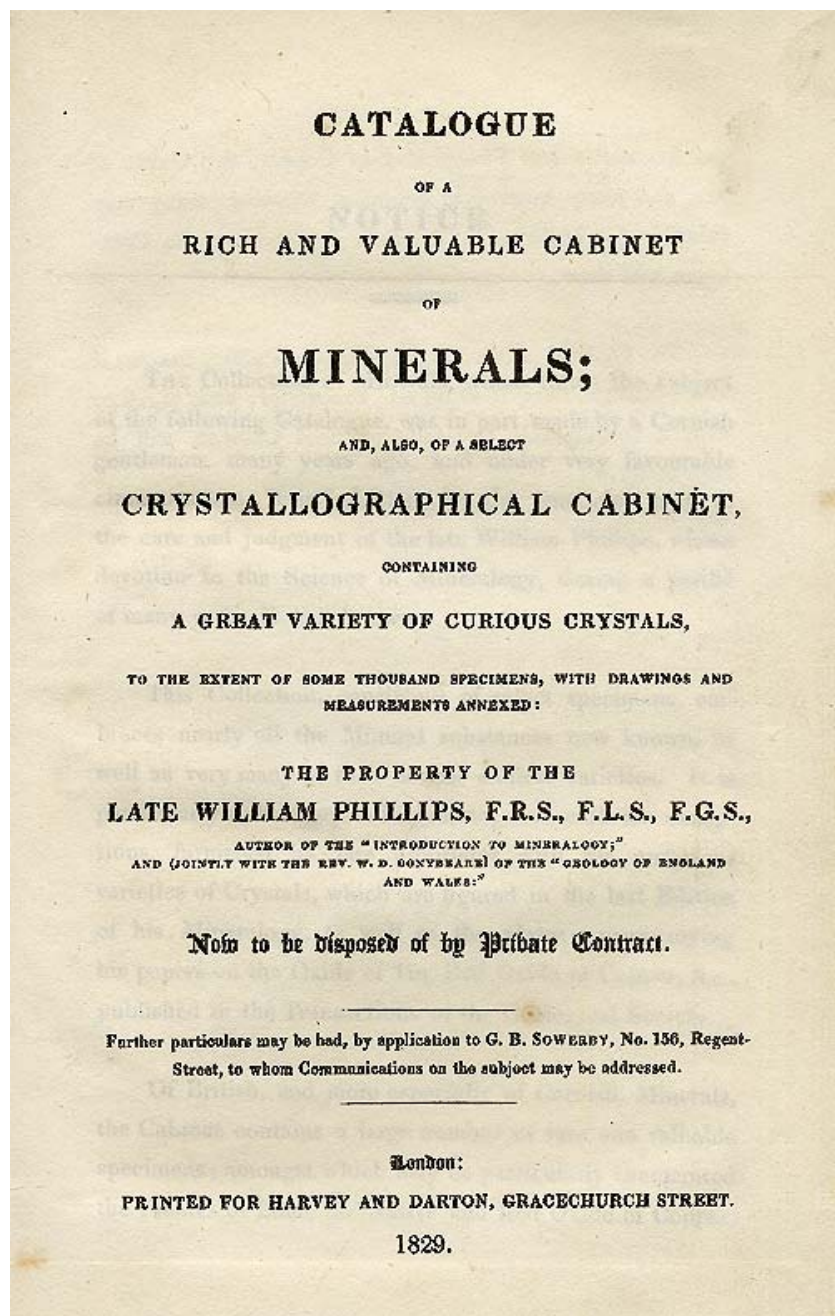
(46) CATALOG OF THE ROYAL IMPERIAL
MINERAL COLLECTION
IN VIENNA

PARTSCH, P. (1828) *Das Kaiserlich-Königliche Hof-Mineralien-Cabinet in Wien*.
Published in Vienna by J. G. Heubner.

This small catalog, organized according to the system of Mohs, is really just a mineralogical outline of a systematic arrangement of the enormous collection of Franz Stefan von Lothringen (1708-1765), indicating the room and showcase in which each of the species was displayed. According to the fold-out floor plan, there were three connected salons and a mosaic room. This collection, which had absorbed the huge Von Baillou collection in 1748, was established as a public institution by Stefan's widow, Maria Theresa, after his death in 1765, and she hired Ignaz von Born to be its curator. Born died in 1791, but the collection continued to grow by the acquisition of still other major collections, including those of Anton Ruprecht (1814), Baron Franz Müller von Reichenstein, the discoverer of tellurium and the Director of Mines in

Transylvania (1825), Karl von Ployer (1812) and Johann Fichtel (1795), among many others. In 1889 the Royal Imperial collections were reorganized into the present Naturhistorisches Museum.

Paul Maria Partsch (1791-1856), the author of the catalog, had inherited a fortune in 1824, and as of 1828 was serving as Inspector of the Royal Imperial Natural History Collections. He was a founding member of the Austrian Academy of Science and helped finance many mineralogical publications.



(47) CATALOG OF WILLIAM PHILLIPS
(1775-1828)

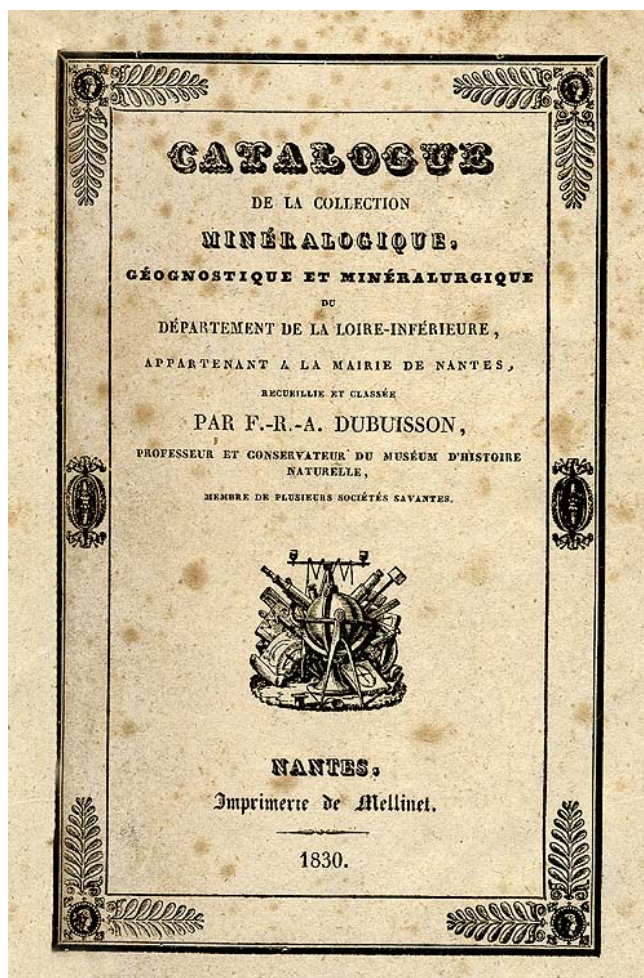
SOWERBY, G. B. (?) (1829) *Catalogue of a Rich and Valuable Cabinet of Minerals; and also of a select Crystallographic Cabinet, containing a Great Variety of Curious Crystals, to the extent of some thousand specimens, with drawings and measurements annexed; the property of the late William Phillips, F.R.S., F.L.S., F.G.S., author of the*

“Introduction to Mineralogy”; and (jointly with the Rev. W. D. Conybeare) of the *“Geology of England and Wales”*: now to be disposed of by private contract. Published in London by Harvey and Darton.

William Phillips was a prominent British mineralogist and author, the elder brother of Richard Phillips (1778-1851) and a son of James Phillips (who printed Pryce’s *Mineralogia Cornubiensis* in 1778). William’s mineral collection numbered about 1,000 specimens and included a “crystallographic cabinet” of interesting crystal specimens. His collection was “in part made by a Cornish gentleman, many years ago, under very favourable circumstances,” and was enlarged by Phillips. Most of the specimens figured in Phillips’ well-known *Introduction to Mineralogy* were drawn after specimens in this collection. The collection was particularly rich in Cornish specimens, especially native copper, cuprite, calcite, cassiterite, and various copper arsenates and phosphates. The specimens are generally well-identified as to locality, especially the Cornish examples for which many specific mine names are cited.

The Phillips family was cordial with the Sowerby’s; Richard had loaned many specimens to James Sowerby for illustration in his *British Mineralogy*, and James’ son George was apparently the executor of the Phillips mineral collection. Sowerby sold the collection as a whole to Dr. John Rutter, who later bequeathed it to the Medical Institution of Liverpool. It was transferred from there to the Liverpool Museum, where it was destroyed by German bombing in 1941.

The copy shown here is in perfect mint condition.

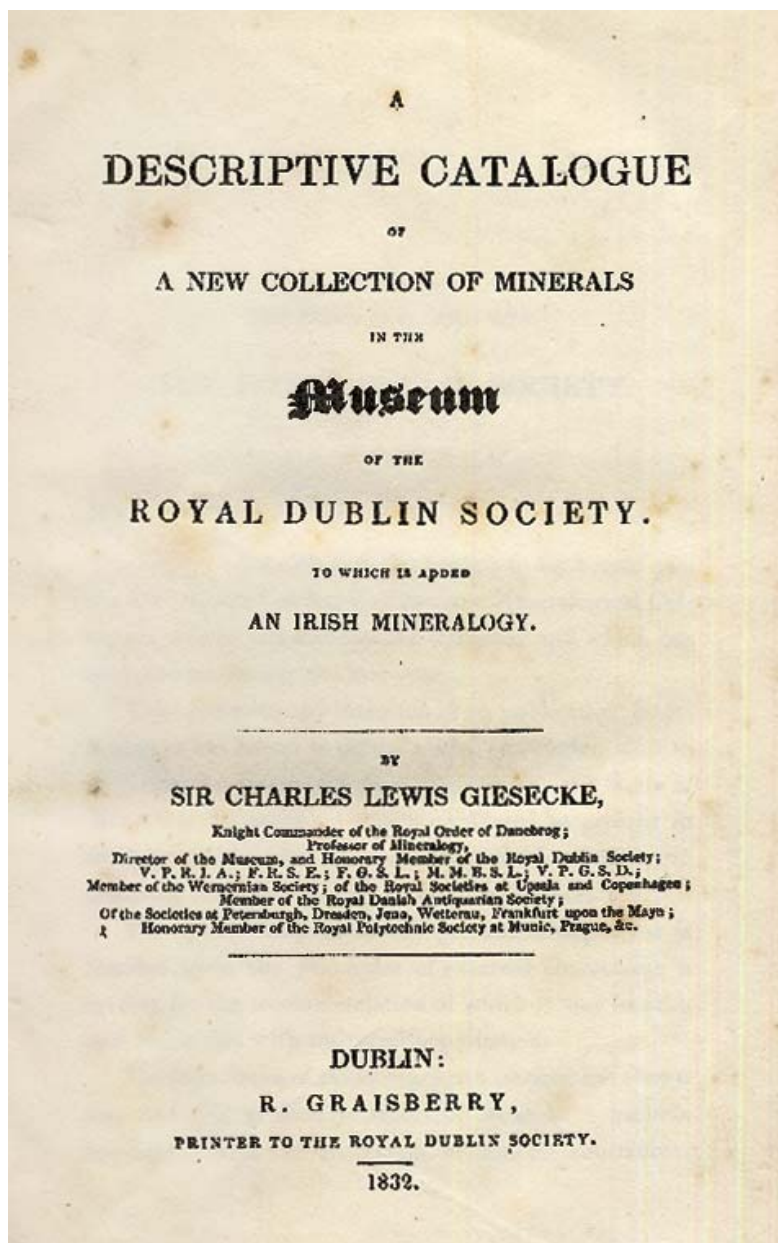


(48) CATALOG OF FRANÇOIS DUBUISSON
(1763-1836)

DUBUISSON, F.-R.-A. (1830) *Catalogue de la Collection Minéralogique, Géognostique et Minéralurgique du Département de la Loire-Inférieure, appartenant à la Mairie de Nantes, recueillie et classée*. Published in Nancy by De Mellinet.

François-René-André Dubuisson, the son of a goldsmith, apprenticed as an apothecary and opened his own shop in Nancy in 1788. He had a strong interest in the natural sciences, and during the 1790's he collected mineral, plant and animal specimens wherever possible, especially in the Loire-Inférieure area. In 1799 he presented his collections (including his "magnificent collection of minerals") to the city of Nancy, and was appointed Director of the new museum of natural history; it opened its doors to the public in 1810.

In 1830 Dubuisson prepared a catalog of the museum's collections which he had built, describing the most productive collecting areas and then listing the mineralogical specimens in detail, by locality—209 localities within the five *arrondissements* or divisions within the department.



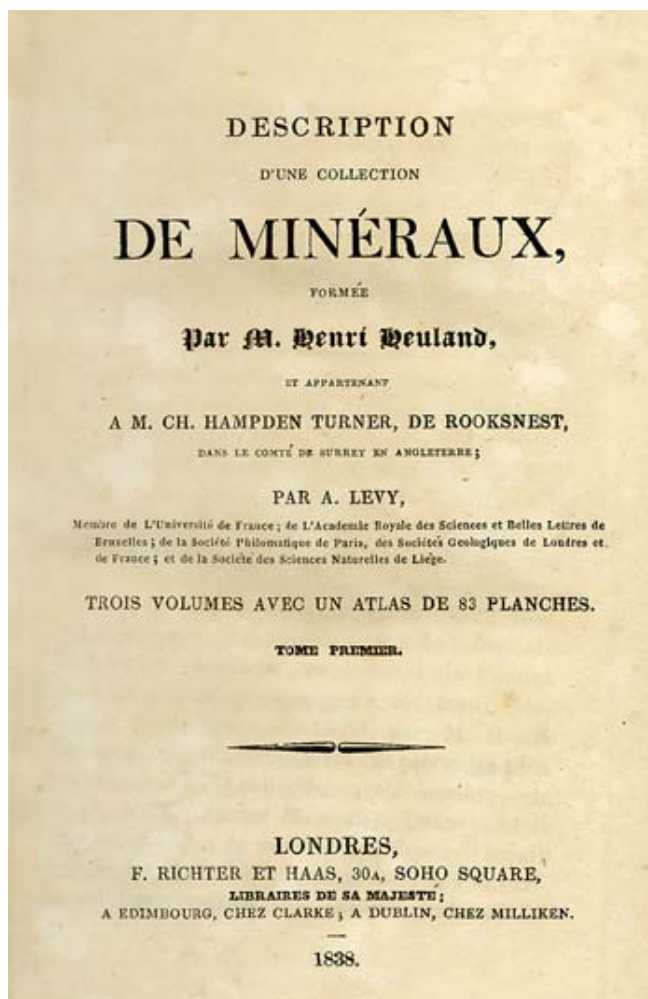
(49) CATALOG OF THE ROYAL DUBLIN SOCIETY

GIESECKE, C. L. (1832) *A Descriptive Catalog of a New Collection of Minerals in the Museum of the Royal Dublin Society, to which is added an Irish Mineralogy*. Published in Dublin by R. Graisberry.

Charles Lewis (Karl Ludwig) Giesecke (1761-1833) was a German mineralogist and field collector. He made several collecting trips to Greenland and Ireland in particular, later distributing specimens to Thomas Allen (in 1808), to the Geological Museum in Copenhagen (in 1814) and to the Museum of the Royal Dublin Society (in 1815), among others. He was made a

Professor of Mineralogy and Director of the Dublin Museum, where he spent a year preparing the catalog of their collection (which was heavy in his own donations). It was published in 1832, the year before his death.

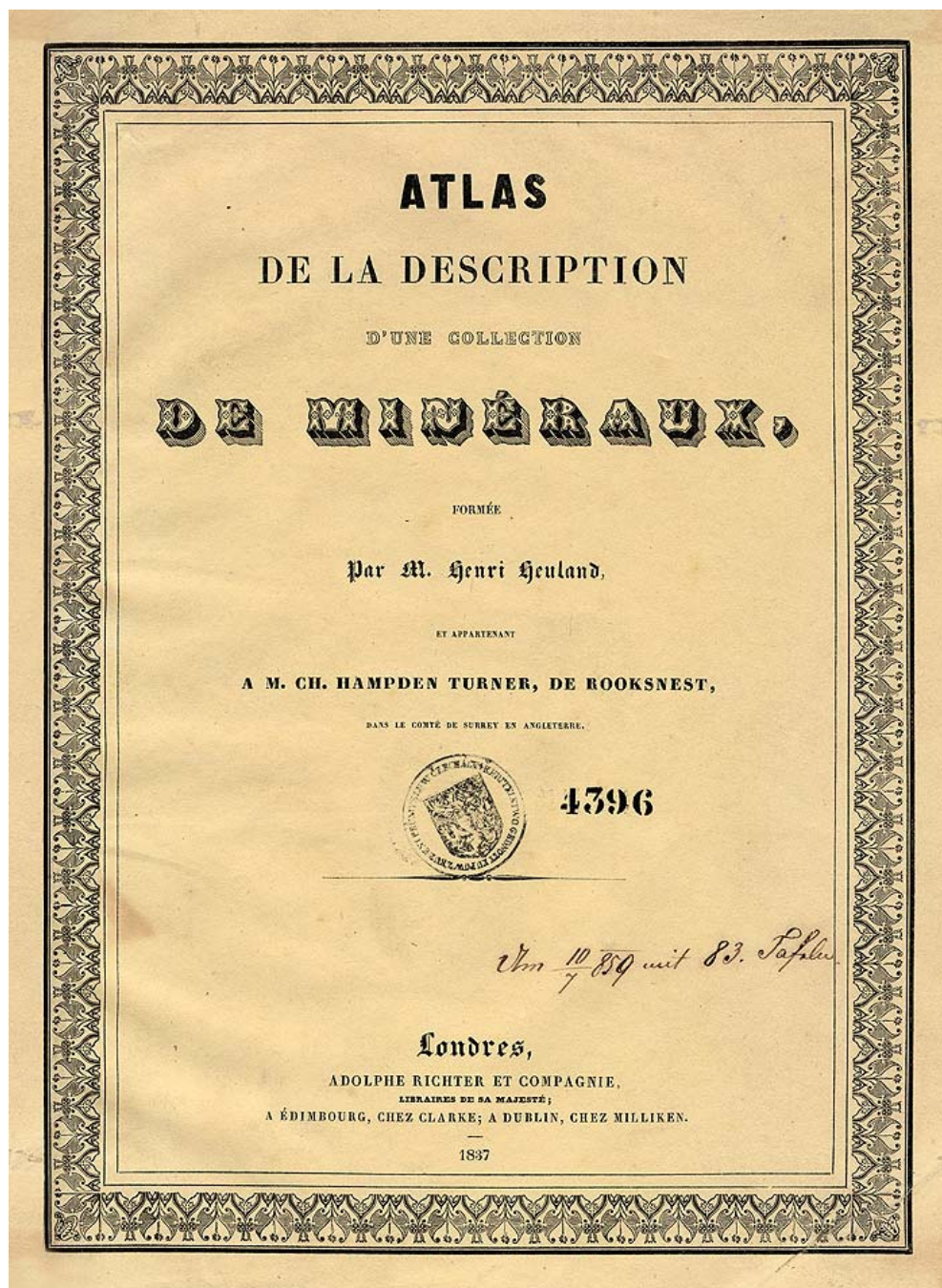
Each specimen in the catalog is numbered, the non-metallic minerals totaling 1,585 specimens and the metallic species equaling 747, for a total of 2,332 specimens. He then lists 229 species found in Ireland, many of them personally collected, giving their descriptions and detailed locality data. In some cases the list of localities is substantial; galena, for example, is noted from over 50 separate occurrences in Ireland.



(50) CATALOG OF CHARLES HAMPDEN TURNER
(B.CA. 1780'S)

LEVY, A. (1838) *Description d'une Collection de Minéraux, formée par M. Henri Heuland, et appartenant à M. Ch. Hampden Turner, de Rooksnest, dans le Comté de Surrey en Angleterre*. Three volumes and an atlas, published in London by Richter and Haas.

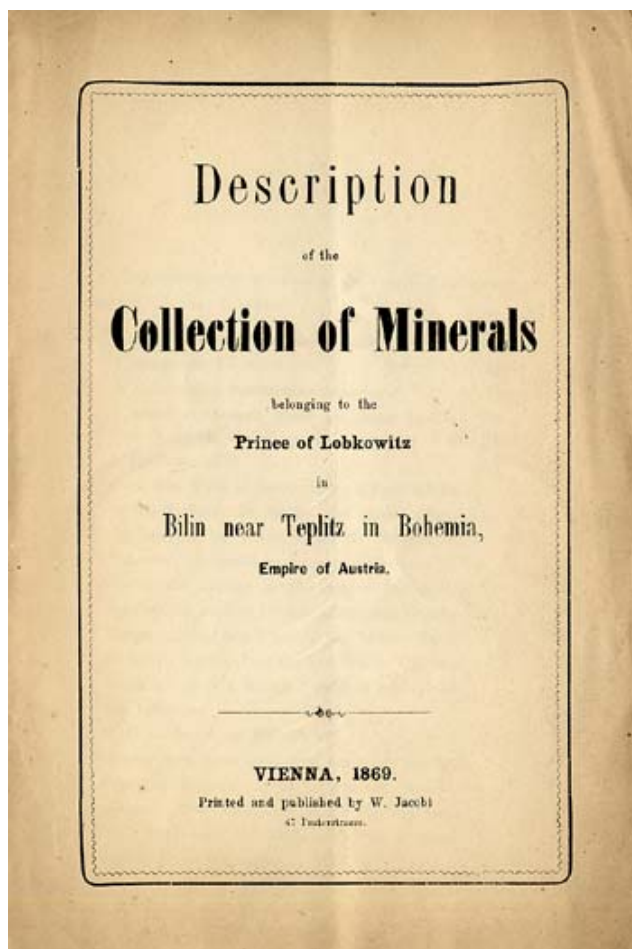
John Henry Heuland (1778-1856) was a prominent and successful London mineral dealer and nephew of mineral dealer Adolarius Jacob Forster (1739-1806). Heuland inherited a fine collection from Forster in 1806, and continued to add to it until 1820, when he sold it to Charles Hampden Turner of Rook's Nest, Godstone, Surrey, England. Heuland and Turner agreed that an elaborate catalog of the collection should be published, classified according to the system of Haüy and illustrated by an atlas of crystal drawings. The introduction (in French, translated here) in volume 1 explains the problems that were encountered:



The late Mr. Jacob Forster formed, over the course of forty years, a very beautiful collection of minerals, in general of the two to three-inch format, which was continued from 1806 until 1820 by Mr. Henry Heuland, and enriched by him with the most invaluable pieces. This collection was sold, in 1820, to Mr. Charles Hampden Turner, and it was decided that a *catalogue raisonné* would be published. Preparation of the catalogue was entrusted to Mr. Armand Levy who, at that time, was residing in London. In giving this task to Mr. Levy, Mr. Heuland did not believe it necessary to have a formal contract with him: he simply accounted to him a sum of so much per month. But he was to regret the postponement of this little of precaution. At the end

of seven years, Mr. Levy, providing assurances that the drawings were finished, as well as the tables containing measurements of the angles of the crystals, proposed to have the work printed in Brussels, where he was to form a partnership with one of his friends, and where the printing would be less expensive than in England. Mr. Heuland accepted the proposal, and agreed to pay more than 100 pounds sterling so that Mr. Levy could relocate himself to Belgium. This was in June 1827. Immediately upon arriving in Brussels, he went to work, and Mr. Wahlen, the printer, and Mr. Pletinckx, the lithographer, each began to work on the project; meanwhile, Mr. Levy drew 15 pounds sterling per month from Mr. Heuland to supervise the printing of the text and the plates. This operation had begun in August 1827, but in November 1828 Mr. Levy, after having received more than two thousand pounds sterling in emoluments, without regard for his commitment and despite the proper representations of Mr. Heuland, abandoned his work and the enterprise to take a professorship in Liege, a professorship which would not have prevented him from continuing to supervise the printing of the work in his spare time. But it was not to happen, and nothing was done from this time until 1832, when political events and changes caused the return of Mr. Levy to France. This professor then promised sincerely to finish the plates, but it was always only promises, and he did not complete anything. However, so that the great sum of money already devoted to the execution of this work would not be lost, Mr. Heuland availed himself of the friendship and the extreme kindness of Mr. Henry James Brooke, who, with his son, Doctor Charles Brooke, found a young man in London, Mr. E. Brookes, whom they charged with completing this work. This young man, with the help of their instructions, managed to carry out the drawings of the thirty-four plates which remained to be made, and as well as Mr. Levy could have done himself. If this work, which contains descriptions and figures of the crystals of a great number of very rare substances and many new varieties of form, is finally finished, it is not without grief as you have just seen.

The compilation stands as one of the most elaborate and technically detailed catalogs of any mineral collection. During its preparation Levy described a number of new species based on specimens in the collection, including forsterite, babingtonite, brochantite, roselite brookite, herschelite, phillipsite and beudantite.



(51) CATALOG OF THE PRINCES OF LOBKOWITZ:
JOSEPH FRANZ MAXIMILIAN LOBKOWITZ (1772-1816)
FERDINAND JOSEPH LOBKOWITZ (1797-1868)

RUBESCH, J. (1869) *Description of the Collection of Minerals belonging to the Prince of Lobkowitz in Bilin near Teplitz in Bohemia, Empire of Austria*. Published in Vienna by W. Jacobi.

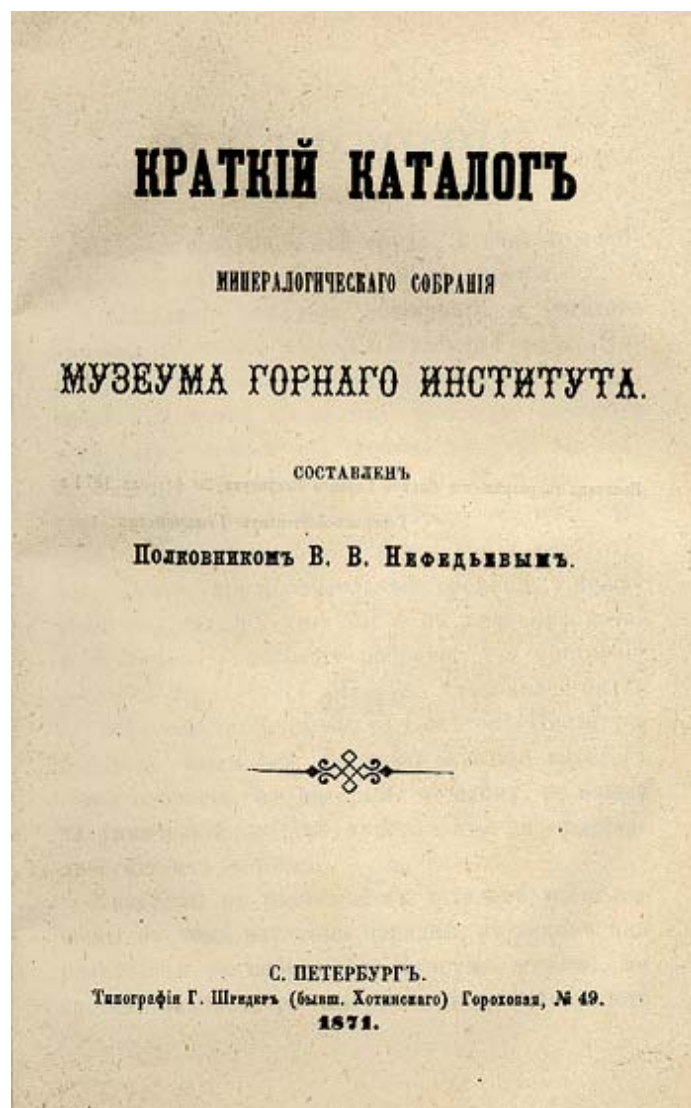
Joseph Franz Maximilian Lobkowitz (1772-1816) was a Bohemian prince in the town of Bisin near Topliz. He assembled an enormous collection of minerals, added to by his son, Prince Ferdinand Joseph Lobkowitz (1797-1868). Following the younger prince's death the collection was organized and a sale catalog, really just a prospectus, was prepared. It does not describe many individual specimens, but gives the number of specimens, in boxes and mounted on boards, in each category, and does cite a few highlights. For example, "The axinite from Bourge d'Oisans is remarkable for the largeness of its crystals," "In the series of the tourmaline there are crystals eminent in every respect; besides, a large red crystal from Siberia is one of the curiosities of this species," and "The species of sphene possesses uncommonly fine single and twin-crystals, among which a colossal twin-crystal from Arendal." Under "metals" the catalog mentions "most

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remarkable native tellurium in small crystals, and amalgam with a surprisingly beautiful specimen from Moschellandsberg [moschellandsbergite] which contains a magnificent rhomb-dodekahedral crystal...this may undoubtedly be considered as one of the finest specimens existing of this species.”

The collection, numbering an amazing 41,217 specimens weighing a total of 80 tons (averaging nearly 4 pounds per specimen), is said by Rubesch to be “universally acknowledged as one of the largest and most beautiful of private collections existing, and inferior to none in all the Austrian Empire but the Imperial Collection of Minerals in Vienna.” It had been built at a cost of 100,000 florins, and was ultimately purchased in 1870 by the Hungarian National Museum for 35,000 florins. Whether its overall quality matched its mass, and whether it really did compare favorably to other Austrian collections like that of Null, is unknown but, judging from the descriptions of the highlights, it contained a great many superb specimens..

The catalog lists 11,675 specimens in the main oryktognostic collection, 2,150 in the geognostic collection, 1,545 petrifications, 2,492 specimens collected from the Princes’ own estates, the collection of 7,071 specimens from the Tepliz-Bilin area made by Reuss while preparing his *Geognostic Sketches of Bohemia* (1840), and by Ettinghausen while preparing his *Fossil Flora of the Tertian Basin of Bilin* (1866), 3,372 “natural curiosities forming various figures and fanciful designs,” an oryktognostic sub-collection of 2,962 specimens arranged according to the system of Mohs, 6,258 specimens from various localities in the Austrian Empire, and various other small sub-collections.

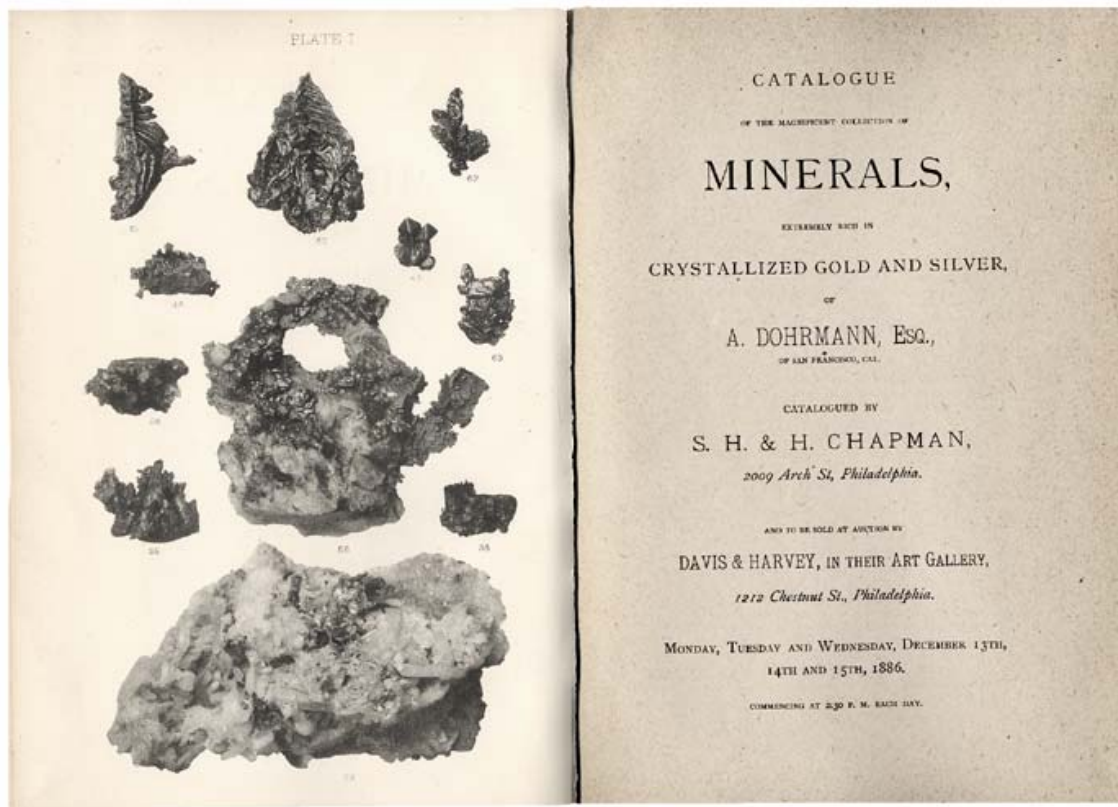
This extremely rare catalog (I know of no other copy) is only 12 pages long, and is printed on brittle, high-acid paper typical of the 1860’s. To preserve this rarity the paper has been de-acidified, and the paper-wrapped booklet has been mounted in a map-pocket attached to the inside cover of a hard-bound photocopy of the same work prepared on cotton paper. A note at the end states “Translated from German by H. Berger,” from which we may conclude that there was probably also a German edition, but it is likely that no copies of it survive.



(52) CATALOG OF THE
ST. PETERSBURG MINING INSTITUTE

Нефедьевымъ, В.В. [NEFEDEV, V. V.](1871) *Краткій Каталогъ Минералогическаго Собранія Музеума Горнаго Института*. [“*Concise Catalog of the Mineralogical Collection of the Museum of the Mining Institute*”] Published in St. Petersburg by T. G. Shreder.

This catalog, prepared by Colonel V. V. Nefedev (entirely in Russian), describes the mineralogical collection in the museum of the St. Petersburg Mining Institute; 519 species are listed, along with their localities, arranged according to the fifth edition (1868) of Dana’s *System of Mineralogy*.

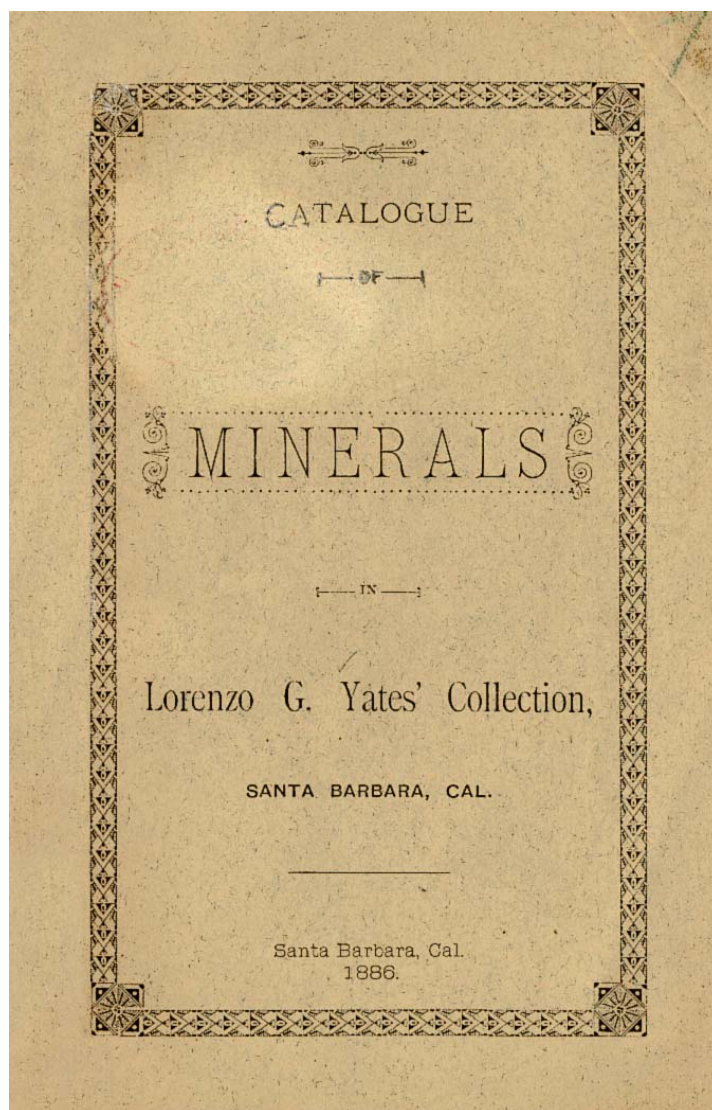


(53) CATALOG OF A[UGUST?] DOHRMANN
(1826-1886?)

CHAPMAN, S. H., and CHAPMAN, H. (1886) *Catalogue of the Magnificent Collection of Minerals, extremely rich in Crystallized Gold and Silver, of A. Dohrmann, Esq., of San Francisco, Cal.* Published in Philadelphia by S. H. and H. Chapman..

A[ugust?] Dohrmann was a Hamburg-born house-builder who lived in San Francisco with his Chilean-born wife, Maria, and his partner in the business, Rudolph Talman (also from Hamburg). He formed a superb collection “extraordinarily rich in beautiful and rare crystallized specimens of gold, silver and cinnabar, which, as far as we are informed, surpass the other examples known from the Pacific Slope of the United States, and which region this cabinet principally represents.” The collection was arranged according to the fifth edition of Dana’s *System of Mineralogy* (1868). This was one of the most important collections ever to appear at auction in the United States during the 19th century, and a number of serious collectors attended. The nine artotype plates show a number of fine gold specimens which are still well-known today, some of which are preserved in the Harvard Mineralogical Museum as part of the Georges de la Bouglise Collection.

Only 100 copies of the Dohrmann catalog were published, and were sold at the production cost of \$1 each. The auction, by S. H. and H. Chapman (specialists in numismatics, antiquities, scientific and archeological collections) took place on December 13-15, 1886, at the art gallery of Davis and Harvey on Chestnut Street in Philadelphia.



(54) CATALOG OF LORENZO GORDIN YATES
(1837-1909)

YATES, L. G. (1886) *Catalogue of Minerals in Lorenzo G. Yates' Collection, Santa Barbara, Cal.* Published by the author in Santa Barbara.

Lorenzo Gordin Yates came to the United States from England at the age of fourteen. He studied medicine and dentistry in the East, and moved to California around 1864. His interest from early childhood in collecting minerals, fossils and shells resulted in a lifelong study of numerous aspects of natural history. He wrote and lectured extensively about mineralogy, conchology, paleontology, botany, ethnology and other subjects while building his collections. Yates was President of the Santa Barbara Society of Natural History, Secretary of the Board of

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Horticultural commissioners of Santa Barbara County, and President of the Santa Barbara Chapter of the Agassiz Association. He was a Fellow of the Linnaean Society of London, an associate member of the Victoria Institute of London, and an honorary member of many other scientific organizations.

Yates published separate catalogs of his mineral, fossil and shell collections in 1885-1886. His mineral collection catalog, a slim volume of 71 pages on high-acid paper, lists 1,674 specimens with localities and occasional descriptive information. His gold specimens were primarily from several mines in Colorado and a dozen mines in Baja California, making them quite rare and unusual in terms of provenance. Likewise his specimens of hemimorphite, calcite and smithsonite, of which there were 15, 56 and 22 respectively, came not from the usual sources but primarily from the mines at Mineral Point, Wisconsin. He had no less than 50 crystals of durangite from the type locality in Durango, Mexico; many cerussite, anglesite and pyromorphite crystals from the Wheatley mine in Pennsylvania; carrollite from the type locality in Carroll County, Maryland; five columbite crystals from Haddam, Connecticut; and 26 tourmalines from pegmatites in New England and the eastern seaboard states. Many specimens were from localities in the American Southwest, including a native silver from the Silver District, Yuma County, Arizona, the same district in which the famous Red Cloud mine is located (I have never heard of a surviving silver from there).

ACKNOWLEDGMENTS

My thanks to Renato Pagano, who provided much of the information used here in the description of the 1813 Malacarne book. My thanks also to Curtis Schuh, Si and Ann Frazier and Tom Moore for reviewing the above text and offering helpful suggestions. Most of the text of this article was previously published in the *Journal of the Geo-Literary Society*; my thanks to journal editors Si and Ann Frazier for permission to revise, expand and reprint it here.