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1. ABBOT, Henry Larcom. Manitowoc, Wis. Its Harbor Lines, Car-Ferry, Slips and Dock Facilities. Report to the Milwaukee & Lake Winnebago Railroad Company, submitted December 5, 1895. One large folding lithographed map (here on two large sheets). 12 pp. 8vo, orig. printed wrappers. Boston: A. Mudge & Son, 1896.

First edition. Manitowoc is a city on Lake Michigan located at the mouth of the Manitowoc River. This is a description of the harbor and the proposed improvements which would enable the city to become one of the chief ports of the Great Lakes region, connecting the great grain-growing areas of the Northwest and the eastern seaboard.

Abbot (1831-1927), was a retired colonel in the Army Corps of Engineers and consultant to the Milwaukee & Lake Winnebago Railroad Company.

Fine copy preserved in a box. Scarce. Ex Bibliotheca Mechanica.

2. AGUDIO, Francesco, comp. *Catalogo del Gabinetto Anatomo-Patologico della R. Scuola di Ostetricia in Milano*. Numerous tables in the text. 42, xix pp., one leaf of index. Small folio, orig. printed blue wrappers (a little frayed). Milan: D. Salvi, 1862. \$375.00

First edition of this very rare catalogue of the anatomico-pathological preparations in the Royal School of Obstetrics at Milan, consisting of specimens,

wax preparations, and drawings of deformed pelvises, embryos, genital organs, etc. The section on pelvises lists 145 specimens with extensive descriptions and tables of measurements. The final pages contains a long description of a fetus of Siamese twins.

Very good. OCLC locates only the copy at NLM.

3. ALLEMAND, — . Introduction et Plan d'un Traité général de la Navigation intérieure, et particulierement de celle de la France; et Considérations sur les Forêts, Bois & autres objets susceptibles d'amélioration, au moyen de nouveaux débouchés: avec un Traité des Péages . . . 16, 152 pp. Large 4to, attractive antique mottled sheep, spine gilt, green morocco lettering piece on spine. Paris: Cellot & Jombert, 1779. \$1250.00

First edition. Allemand, a former administrator of forests in Corsica with physiocratic inclinations, describes here his plan for the extension of canals throughout France in order to increase trade and allow the raw materials of France to be exploited.

Fine copy. Ex Bibliotheca Mechanica.

4. ANTOINE, Pierre Joseph. *Navigation de Bourgogne, ou Mémoires et Projets pour augmenter & établir la Navigation sur les Rivieres du Duché de Bourgogne... Tome Premier* [all published]. Two large folding engraved plates, one of which is a map. 5 p.l., 289, [4] pp. Large 4to, cont. mottled sheep (extremities a little worn, upper joint partly cracked but strong), spine gilt. Amsterdam: 1774.

First edition of this collection of memoirs regarding improving the navigability of the rivers of Burgundy and the construction of strategic canals throughout the province. The author provides, in a chronological arrangement, much information on the history and costs of the planned projects.

Antoine (1730-1814), was chief engineer of the *département* of the Côte-d'Or and professor of architecture at Dijon.

One of the plates depicts the projected lock at Auxonne.

Very good copy and rare with no copy in N.U.C. Ex Bibliotheca Mechanica.

A Very Pretty Set

5. AUBUISSON DE VOISINS, Jean François d'. *Traité de Géognosie, ou Exposé des Connaissances actuelles sur la Constitution Physique et Minérale du Globe Terrestre*. Two folding engraved plates (one hand-colored) & one

folding table. 2 p.l., lxi, [1], 496 pp.; 2 p.l., 665 pp. Two vols. 8vo, cont. mottled French sheep, spines attractively gilt, red & green morocco lettering pieces on spines. Strasbourg: F.G. Levrault; Paris: le Prince, 1819.

First edition of the first competent treatment of general geology published in France; it gained wide popularity on account of its clearness and the elegance in its mode of treatment. Aubuisson de Voisins (1769-1841), studied under Werner, taking his courses in mineralogy, geology, and mining, and was appointed chief of the mineralogical district of Toulouse in 1811, an administrative post covering the entire Pyrenees region.

"In this excellent treatise the transition from Neptunianism to more modern and scientific views is well displayed."—Geikie, p. 402.

Handsome set from the Freilich collection with bookplate.

- *▶ D.S.B.,* I, pp. 327-28. Zittel, pp. 143-44.
- **6. AVIANUS**, **Wilhelm**. *Geburtstunde*, *Worzu sie so wol publicè als privatim diene, und warumb dieselbe nicht allein zu Hause, sondern auch umb des allgemeinen Nutzens willen, in öffentliche Geburts-Matrickel, auffs fleissigste auffgeschrieben und eingetragen werden solle. 28 pp. Small 4to, attractive modern marbled boards (paper somewhat browned throughout due to its quality), red morocco lettering piece on spine. Leipzig: M. Rehefeld, 1635. \$1500.00*

First edition of this extremely rare (no copy in N.U.C.) work on astrology. The author, an assessor at Leipzig who compiled a star catalogue (1629), makes frequent references to Kepler.

Fine copy with many lower edges uncut.

A Provocative Synthesis

7. **BAILLY, Jean Sylvain**. Lettres sur l'Origine des Sciences, et sur celle des Peuples de l'Asie, adressés à M.. de Voltaire . . . & précédées de quelques Lettres de M. de Voltaire à l'Auteur. 2 p.l., 348 pp. 8vo, cont. mottled calf, spine gilt, red morocco lettering piece on spine. London: M. Elmesly; Paris: Debure, 1777. \$950.00

First edition of this highly controversial work; in his ten letters to Voltaire, Bailly examined each of the peoples of antiquity as the possible source of civilization. The *Lettres* was an offshoot of Bailly's celebrated *Histoire de l'Astronomie Ancienne* and was a provocative synthesis of newly discovered data. "It was based on the acceptance of Buffon's theory of the origin of the earth... According to this notion, life and, it was natural to suppose, man himself

originated in the northern latitudes."–E.B. Smith in *Transactions* of the Amer. Philo. Society, N.S., Vol. 44, Part 4 (1954). Fine copy.

"A Serious Scientific Contribution to the Subject"

8. BANCROFT, Edward. *Experimental Researches concerning the Philosophy of Permanent Colours; and the Best Means of producing Them, by Dyeing, Calico Printing, &c.* [iii]-lxi, [2], 542 pp.; 2 p.l., 518 pp. Two vols. 8vo, modern half-calf & marbled boards, spines gilt, contrasting morocco lettering pieces on spines. London: T. Cadell & W. Davies, 1813.

\$1500.00

Second edition, greatly revised, "of an important book on the theoretical treatment of dyestuffs and methods and processes of dyeing. It is a serious scientific contribution to the subject, many years in advance of its time. Bancroft (1744-1821) was an American-born physician, one of the early ex-patriates, who spent most of his life abroad, especially in Dutch Guinea and Europe. He was an autodidact who went on to become a member of the Royal Society and the College of Surgeons. He was friendly with Priestley and Franklin, among others, and has a threefold claim to fame: He discovered the dyeing properties (yellow) of the inner bark of the American Black Oak (Quercus velutina), which he introduced and marketed in Europe; he published this book; and he was an independent double agent, spying (for pay) for both sides during the American War of Independence."—Ron, Bibliotheca Tinctoria, pp. 44-45—(1st ed. of 1794).

This new edition includes Bancroft's numerous discoveries made during travels in North and South America.

A very good set. Half-titles lacking.

D.N.B., I, pp. 1025-26–"a valuable account and discussion of the theory of colours and the methods of fixing them." Duveen, p. 639. Partington, III, pp. 515-16. Ron, *Bibliotheca Tinctoria*, 66. Cole describes the first edition and the 1814 American printing of our second edition.

The Strength of Steel; Kirkaldy's Tests

9. [BARLOW, William Henry and others]. *Preliminary Experiments of the Mechanical and other Properties of Steel, made or collected by a Committee of Civil Engineers*. One lithographed plate. 2 p.l., 27 pp. (pp. 1-16 are double-page tables with printing in red). Small folio, orig. cloth, spine lettered in gilt. London: Adams Bros., 1868.

[bound with]:

— Experiments on the Mechanical and other Properties of Steel, made at H.M. Dockyard, Woolwich, by a Committee of Civil Engineers. Three folding lithographed plates & five lithographed tables printed on both sides (four folding). 1 p.l., 4, 30 pp. Small folio. London: Adams Bros., 1870.

\$1350.00

First editions. "Shortly before Kirkaldy opened his testing works in 1865 he was visited by Scott Russell, which led to the setting up of a committee (W. H. Barlow, John Fowler, Scott Russell, Douglas Galton and George Berkley) to initiate experiments into the properties of steel, a material then becoming increasingly available...

"The first of their two reports contain the results of the tests carried out by Kirkaldy on his machine on 29 samples, each 2 inches square and 15 feet long, supplied by thirteen leading steel manufacturers including Bessemer, John Brown & Co., Firth & Sons, the Barrow Haematite Steel Co., and C. Cammell & Co. Unfortunately Kirkaldy came into conflict with Barlow and was further upset when the committee published the results under his name without allowing him time to correct inaccuracies...

"The second report contains the results of another set of experiments to measure further compression and tension, this time carried out on the cable-testing machine in Woolwich Dockyard. It describes how the experiments were performed and again tabulates the results. However, it met with great criticism when published, owing to the worthlessness of results carried out in the old haphazard manner, and added support to Kirkaldy's already considerable reputation. Altogether a fascinating and rare document from the early years of structural steelwork."—Elton, *Cat. 6*, 152.

Fine and fresh copy from the Royal Society of Edinburgh. Ex Bibliotheca Mechanica.

10. BARNARD, John Gross, WRIGHT, Horatio Gouverneur, & MICHIE, Peter Smith. Report on the Fabrication of Iron for Defensive Purposes, and its Uses in Modern Fortifications especially in Works of Coast Defense. 38 lithographed plates (many folding & some quite large) & illus. in the text. 2 p.l., iii, [3]-230 pp. Large 4to, orig. half-sheep & cloth (extremities a little worn), upper cover & spine lettered in gilt. Washington: G.P.O., 1871.

First edition, Professional Papers of the Corps of Engineers, U.S. Army, No. 21. Barnard (1815-82), a graduate of West Point, served on the corp of engineers and worked on many projects during a long and successful career. "When he joined the corps of engineers its officers were engaged in the construction of a system of defenses on the Atlantic and Gulf coasts to supplement the few old works constructed immediately after the Revolutionary War. In this work he served as

superintending engineer of the fortifications of some of our important ports – Portland and New York on the Atlantic coast, Mobile and the mouth of the Mississippi River on the Gulf coast, and San Francisco on the Pacific coast. All of these works were designed to meet the attacks of wooden vessels armed with muzzle-loading cannon. With the introduction of rifled guns and armored vessels, about the time of the Civil War, the coast defenses had to be modified, and after that war Barnard was charged with the study of this problem. On this work he was sent abroad in 1870 to ascertain the progress made in Europe in the development of iron for defensive purposes."-D.A.B., I, p. 626.

This book is the chief work stemming from his European investigations. The plates depict the massive defensive works constructed in England, France, Belgium, and Germany.

Very good copy. Ex Bibliotheca Mechanica.

The Gyroscope

BARNARD, **John Gross**. Problems of Rotary Motion presented by the Gyroscope, the Precession of the Equinoxes, and the Pendulum. Illus. in the text. 2 p.l., 48 pp. Folio, orig. printed wrappers (strengthened on verso with japan paper but still with some small losses at corners). Washington: Smithsonian, 1871. \$250.00

First edition, Smithsonian Contributions to Knowledge, No. 240. "Contains the author's 'The Precession of the Equinoxes and Nutation and Resulting from the Theory of the Gyroscope, 'On the Motions of Freely Suspended and Gyroscopic Pendulums, and on the Pendulum and Gyroscope as exhibiting the Rotation of the Earth,' and 'Internal Structure of the Earth considered as affecting the Phenomena of Precession and Nutation'."-Roberts & Trent, Bibliotheca Mechanica, p. 25.

Very good copy preserved in a green morocco-backed cloth box. Ex Bibliotheca Mechanica.

BARNARD, John Gross. Report on the North Sea Canal of Holland; and on the Improvement of Navigation from Rotterdam to the Sea; to the Chief of Engineers, United States Army. Twelve lithographed plates (all but one folding). 77 pp. Large 4to, orig. half-sheep & cloth (extremities a little worn), upper cover & spine lettered in gilt. Washington, G.P.O., 1872.

First edition, Professional Papers of the Corps of Engineers of the United State Army, No. 22. "In the second half of the 19th century two immense new ship canals were constructed in Holland to connect the cities of Amsterdam and

Rotterdam with the North Sea. This account of them was written for the American Government by an engineer working on the Tehuantepec canal project, one of several isthmian schemes before the construction of the Panama Canal. The North Sea or Amsterdam Canal was built in 1865-76 by John Hawkshaw with the Dutch engineer, Dircks, as resident engineer. A ship canal only slightly smaller than the recently completed Suez canal, it was one of the most ambitious of the later 19th century civil engineering projects and superseded the North Holland Canal of 1819-25, itself the first modern ship canal...

"Barnard gives a history of the scheme before going on to describe some of the principal works, particularly the immense locks at either end which isolated the canal from the waters of the North Sea and of the Zuider Zee. Of interest, too, is the account of the piers which protected the mouth of the canal from the sea. The foundations gave considerable trouble eventually solved by the use of riprap surmounted by large blocks (6 to 10 tons in weight) of Portland cement concrete put in place by overhanging travelling cranes known as Titans. The removal of spoil from the dredgers also taxed contemporary construction methods to the limit but this problem was overcome by a centrifugal pumping system designed and patented by the contractors...

"The second project described here is the New Waterway built by the Dutch engineer, Caland, in 1866-72. It involved the widening of the channel of the Scheur and cutting across the Hook of Holland. Much of Barnard's account is devoted to the provision and maintenance of an effective outfall for the new waterway achieved by two piers built into the North Sea and constructed in the traditional manner using fascines. One of the few English-language books to describe any of the great Dutch hydraulic works."—Elton, *Catalogue 11*, 34.

Very good copy. Ex Bibliotheca Mechanica.

13. BARTHEZ, Paul Joseph. *Nouvelle Méchanique des Mouvements de l'Homme et des Animaux*. 1 p.l., xv, 246 pp., one leaf of errata. Large 4to, cont. mottled sheep, spine gilt, contrasting leather lettering piece on spine. Carcassonne: P. Polere, 1798. \$1250.00

First edition of a noteworthy book on animal and human locomotion. Barthez (1734-1806), "was an extraordinarily influential French physician who helped to popularize vitalistic doctrines at a time when the most unsophisticated forms of mechanism still held sway in biology and medicine... In 1798 he published *Nouvelle méchanique des mouvements de l'homme et des animaux*, in which he demonstrated, through very intricate anatomical analysis, that the simple hydraulic explanations offered by the iatromechanists (particularly Borelli) would never explain the delicate balance and control of muscles that are needed

for such motions as walking and swimming."—D.S.B., II, p. 479. Barthez was an important contributor to Diderot's *Encyclopédie*. Fine and handsome copy. Ex Bibliotheca Mechanica.

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

First edition of this very rare work on the manufacture of various kinds of pottery for use in construction, the kitchen, industry, etc. Bastenaire-Daudenart was the longtime proprietor and manager of the factory of Saint Amand-les-Eaux, and wrote several other books on the manufacture of porcelain, glass, and crockery.

Fine copy.

15. [BAXTER, Andrew]. *Matho: or, the Cosmotheoria Puerilis, a Dialogue. In which the first Principles of Philosophy and Astronomy are accommodated to the Capacity of young Persons, or such as have yet no Tincture of these Sciences. Hence the Principles of Natural Religion are deduced.* Translated, and enlarged by the Author. 7 p.l., 432 pp.; 4 p.l., 395, [1] pp. Two vols. 8vo, cont. calf (joints a little cracked but strong, corners a bit worn), double gilt fillets round sides, spines gilt, red morocco lettering piece on spine. London: Printed for A. Millar, 1740.

First edition in English, enormously enlarged. The first edition, published two years earlier in Latin, was only a small pamphlet of 60 pages. This introduction to astronomy was enormously popular with later editions appearing in 1742, 1745, 1754, and 1765. It is based on Newtonian principles.

Baxter (1686-1750), philosophical writer, supported himself chiefly by acting as tutor to noblemen's sons.

Very good set.

≈ D.N.B., I, p. 1345.

16. BEAUDEMOULIN, Louis Alexis. *Recherches théoriques et pratiques sur la Fondation par Immersion des Ouvrages hydrauliques, et particulièrement des Écluses.* Four folding engraved plates (several slightly foxed). [iii]-xii, 83 pp., one leaf of errata. Large 4to, attractive antique calf-backed marbled boards (title rehinged at gutter, light foxing), spine gilt, red morocco lettering piece on spine, uncut. Paris: Carilian-Goeury, 1829.

\$950.00

First edition. Beaudemoulin (1790-1877), graduated from the École Polytechnique des Ponts et Chaussées, became "Ingénieur en chef," and wrote many works on river control and public health. He was involved in the design and construction of numerous bridges and invented several ingenious mechanisms for their construction (see Tom F. Peters, *Transitions in Engineering* (1987), p. 169).

In the present work, the author describes new methods of creating stable foundations for canals and locks which would not cave-in or leak.

Good copy. Ex Bibliotheca Mechanica.

17. BEAUFOY, Mark. *Nautical and Hydraulic Experiments, with numerous Scientific Miscellanies. Vol. I* [all published]. Engraved frontis. port., 16 engraved plates, & 8 double-page printed tables. 3 p.l., cxix, [1], 688 pp. Large thick 4to, orig. patterned cloth (a bit worn at extremities), printed paper label on spine, entirely uncut. London: Printed at the Private Press of Henry Beaufoy, May 1834. \$1500.00

First edition of these important experiments. Beaufoy (1764-1827), the first Englishman to ascend Mont Blanc, was a founder of the Society for the Improvement of Naval Architecture, the first such organization to exist. "Under its auspices an important series of experiments was conducted at the Greenland Dock during the years 1793-9 by the care, and in part at the cost, of Colonel Beaufoy. Many useful results in shipbuilding were thus obtained, as well as the first practical verification in England of Euler's theorems on the resistance of fluids. The details were printed in 1834."—D.N.B., II, p. 51.

This copy has bound-in the extra engraved presentation leaf, inscribed to the Library of the Writers to the Signet, Edinburgh.

A fine and clean copy of this handsome book. Ex Bibliotheca Mechanica.

- Roberts & Trent, Bibliotheca Mechanica, p. 28.
- **20. BENZENBERG, Johann Friedrich**. Beschreibung eines einfachen Reisebarometers. Nebst einer Anleitung zur leichten Berechnung der Berghöhen.

One engraved plate (outer margin a little shaved) & tables in the text. 2 p.l., iv, 158 pp., 9 leaves, 159-166 pp. 8vo, cont. marbled boards. Düsseldorf: J.C.H. Schreiner, 1811. \$750.00

First edition and a scarce book. Benzenberg (1777-1846), professor of mathematics at the Lyceum in Düsseldorf, performed many original scientific investigations in the fields of astronomy, physics, and geodetics. He was the first to demonstrate that the earth revolves, a problem which had perplexed scientists since Copernicus.

In this work, Benzenberg describes his extended experiments in developing portable barometers, chiefly used for measuring altitude.

Fine copy.

▶ D.S.B., I, pp. 615-16.

21. BIOT, Jean Baptiste. *Traité Élémentaire d'Astronomie Physique*... Sixteen folding engraved plates. xxviii, [2], 330 pp.; 2 p.l., [331]-582 pp. Two vols. 8vo, cont. half-calf & marbled boards (a few leaves in first volume lightly dampstained), spines gilt in the romantic style. Paris: Bernard, 1805. \$950.00

First edition of one of the most important and successful textbooks of the time; it constitutes a thorough account of contemporary astronomy.

Very pretty set.

▶ D.S.B., II, pp. 133-40.

22. BISCHOFF, Ignaz Rudolph. *Grundsaetze zur Erkenntniss und Behandlung der Fieber und Entzündungen...* Added engraved title-page. xii, 547, [1] pp. 8vo, cont. half-calf & marbled boards (one corner rather worn, two others slightly so), flat spine richly gilt. Vienna: Strauss, 1830. \$500.00

Second edition, revised. The first edition appeared in the same year; a second volume was published in 1840 and, for obvious reasons, they rarely appear together.

Ignaz Rudolph Bischoff, Edler von Alternstern (1784-1850), was born in Kremsmünster and in 1813 became professor at the medical clinic at Prague where he proved to be a very able specialist in internal diseases. Three years later he was appointed chief physician at the main hospital of Prague and in 1826 he came to Vienna to take the position of director of the medical clinic and professor of clinical medicine at the famous *Josephinum* or Medico-Chirurgical Academy, founded by Joseph II in 1785. Bischoff is an outstanding example of

a Viennese physician who, on the one hand, demonstrated a tendency to clinical observation of the expiring Stoll-Hildenbrand era while, on the other hand, showed some of the ideas of the Romantic medicine of the New Viennese school.

He is especially remembered for his efforts in combating the first cholera epidemic in Vienna and for directing the vaccination program against small pox in Bohemia. His chief contributions were made as an outstanding practicing physician and a teacher of clinical methods. His many books demonstrate a level-headed point of view and a clarity of description.

Apart for the wear to the corners, a fine copy. Scarce.

** A.D.B., II, p. 674. Hirsch, I, p. 550. Lesky, *The Vienna Medical School of the 19th Century*, pp. 23 & 34. N.B.G., Vol. 6, col. 135. Wurzbach, I, 410–"Bischoff entwickelte nach den verschiedensten Seiten eine fast unglaubliche Tätigkeit… Bedeutend sind Bischoffs Verdienste als praktischer Arzt und Lehrer, aber auch als Schriftsteller hat sich Bischoff um die Wissenschaft durch tüchtige Werke selbst im Ausland anerkannte Verdienste erworben."

An Auto-Bibliography

23. BOUILLAUD, Jean Baptiste. Notice sur les Titres et Travaux de M. le Docteur J. Bouillaud, Candidat a la Place vacante dans la Section de Médecine et de Chirurgie de l'Académie des Sciences. 82 pp. 4to, orig. printed wrappers. Paris: E. Martinet, 1868. \$350.00

First edition. Bouillaud (1796-1881), is one of the important figures in the history of 19th-century French medicine. He identified the anterior lobes as the speech center and gave classical accounts of aphasia and rheumatic fever ("Bouillaud's syndrome"). In 1868 Bouillaud was a candidate for membership in the section of medicine and surgery of the French Academy of Sciences. In support of his candidacy he submitted to the Academy a bibliography of his publications which is divided into two parts. The first part lists all the memoirs Bouillaud published in different periodicals from 1823 to 1866; the second part contains a list of his books from his *Traité des Maladies du Coeur* (1824) to the *Traité de Nosographie medicale* (1846). All entries are fully annotated by the author and his commentaries often extend over several pages.

Very good copy and surprisingly rare. Owner's stamp of the psychiatrist J. Falret (1824-1902) on front cover.

24. BOULANGER, David. *Dissertation sur la Dysenterie*. 17 pp. Large 4to, attractive modern marbled wrappers. Paris: Didot jeune, 1812.

\$175.00

First edition of this rare dissertation — no copy in OCLC — on dysentery. Boulanger describes the varieties and symptoms of dysentery and methods of diagnosis and treatment.

Fine copy.

25. BREMSER, Johann Gottfried. Über lebende Würmer im lebenden Menschen. Ein Buch für ausübende Aerzte. Finely engraved vignette on title & four color printed plates. 1 p.l., xii, 284 pp., four leaves of explanatory text for the plates. Large 4to, cont. half-calf & marbled boards, flat spine nicely gilt, interlocking "CL" at head of spine. Vienna: C. Schaumburg, 1819.

First edition of this classic study of parasitic worms by Bremser (d. 1827), curator of the Natural History Museum in Vienna. The very striking illustrations were drawn from nature by Johann Tebmayer and engraved by Heinrich Mansfeld.

Fine and pretty copy from the library of Archduke Charles, the nephew and adoptive heir of Duke Albert of Saxe-Teschen.

- № Hirsch, I, p. 689.
- **26. BRETON**, **Séraphin**. *Dissertation sur la Peste, ou Fièvre Adéno-Nerveuse*. vi, [7]-52 pp. Large 4to, attractive modern marbled wrappers. Paris: Didot jeune, 1814. \$225.00

First edition and rare with no copy in OCLC. Breton, was a native of Tekirdag (Rodosto), a city in Eastern Thrace, on the European part of Turkey (formerly Greece). This is a monograph concerned with the Black Death or bubonic plague. Breton provides a history of the outbreaks of this epidemic and a number of interesting case histories. Much detail is given regarding symptoms and treatments.

Fine copy.

Presentation Copy to Duhamel du Monceau A "Celebrated Classic"

27. BRISSON, Mathurin-Jacques. Regnum Animale in Classes IX distributum, sive Synopsis Methodica Sistens Generalem Animalium distributionem in Classes IX, & duarum primarum Classium, Quadrupedum

scilicet & Cetaceorum, particularem divisionem in Ordines, Sectiones, Genera & Species [with facing title-page in French]. Two folding printed tables & one folding engraved plate. 3 p.l., [iii]-vi, [2], 382, [2] pp. 4to, cont. calf (corners a bit worn), triple gilt fillet round sides, spine nicely gilt, red & brown morocco lettering pieces on spine, a.e.g. Paris: C.J.B. Bauche, 1756.

First edition "of this celebrated classic . . . [it] is regarded as next in authority to the Linnaean productions."—Wood, p. 257. This is a fine presentation copy from Brisson to Duhamel du Monceau (1700-82), French polymath, who made notable contributions in agronomy, chemistry, botany, and naval technology. Brisson has inscribed on the free front-endpaper: "A Monsieur Duhamel, de la part de son tres humble serviteur. Brisson."

Brisson (1723-1806), was a close collaborator of Lavoisier and successor of Nollet to the chair of experimental physics at the Collège de Navarre. He was an important and influential disseminator of the ideas of physics through his teaching and writings. In 1756, Brisson "published the *Règne animal*, a bilingual work with Latin and French texts printed side by side. In it he announced the project [to give a general description of the animal world], presented the classification, and dealt with the study of the first two classes: quadrupeds and cetaceans."–*D.S.B.*, II, p. 474.

Fine and pretty example and a very appealing association copy. Text in Latin and French in parallel columns.

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

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

Very good copy. Ownership inscription on title dated 1791.

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

His Second Book

29. BRONN, **Heinrich Georg**. System der urweltlichen Pflanzenthiere durch Diagnose, Analyse und Abbildung der geschlechter erläutert. Zum Gebrauche bey Vorlesungen über Petrefactenkunde und zur Erleichterung des Selbststudiums derselben. Seven folding lithographed plates. iv, 47, [1] pp. Folio, cont. marbled boards. Heidelberg: J.C.B. Mohr, 1825. \$750.00

First edition of Bronn's second book. Bronn (1800-62), was professor of natural science at Heidelberg; "fundamental systematic works in paleontology are Bronn's most enduring contribution to science."—D.S.B., II, p. 497. Bronn's collection of fossils was purchased by Louis Agassiz for the then newly established Museum of Comparative Zoology at Harvard.

This paleontological work foreshadows the enormously important work in this discipline performed by Bronn in the 1830s and 1840s.

Fine copy, interleaved throughout. Minor foxing. From the library of His Serene Highness Prince Fürstenberg at Donaueschingen.

№ Poggendorff, I, 307.

30. BROUGHAM, Henry Peter, Baron Brougham & Vaux. *General Theorems, chiefly Porisms, in the Higher Geometry...from the Philosophical Transactions.* One folding engraved plate. 21 pp. Large 4to, attractive antique calf-backed marbled boards, spine gilt, red morocco lettering piece on spine. [London: 1798]. \$750.00

First separate edition, an offprint with new pagination. Presentation copy, inscribed by Brougham "With best compts from the Author" (inscription a little cropped). Brougham (1778-1868), showed an unusually precocious interest in experimental science as a youth and by the age of twenty had contributed three papers, of which this is the third, to the *Philosophical Transactions*. By the age of twenty-five he had been made a fellow of the Royal Society. Later he concentrated on law and politics and became Lord Chancellor.

Fine copy and rare; no copy of this offprint is located in OCLC. Ex Bibliotheca Mechanica.

31. BROWN, Robert. General View of the Agriculture of the West Riding of Yorkshire. Surveyed by Messrs Rennie, Brown, & Shirreff, 1793. With Observations on the Means of its Improvement, and Additional Information since received. Drawn up for the Consideration of the Board of Agriculture and Internal Improvement. One folding engraved map. 1 p.l., 8, xiv, 293 pp.,

one leaf, 121 pp. 8vo, cont. half-calf & marbled boards (well-rebacked by Aquarius), flat spine gilt, uncut. Edinburgh: J. Watson et al., 1799.

\$1250.00

Second edition, revised and much enlarged (1st ed.: 1794). "A more ambitious and prolific writer was Robert Brown of Markle near Haddington, who lived from 1756 to 1831. He was magnificently appreciated in his own day, a situation in which few writers are happy enough to find themselves. He was eulogised by one of his admirers as having produced a work second only to the Bible."—Fussell, *The Old English Farming Books*, III, p. 13. Brown, a farmer who practiced several important experiments on his property, contributed many articles to the Edinburgh *Farmer's Magazine*, of which he was editor for fifteen years.

Nice uncut copy.

- Fussell, The Old English Farming Books, III, pp. 188-90.
- **32. BRUNNER, Joseph**. *Handbuch der Mineralogischen Diagnosis*. xlviii, 326 pp. 8vo, cont. blue-grey boards (binding a little soiled). Leipzig: Kleefeld, 1804. \$1950.00

First edition (?). Brunner (1764-1807), was administrator of the mining offices at Bodenmais in Bavaria. He is best known for his hypothesis concerning the origin of ore bodies (see Adams, *The Birth and Development of the Geological Sciences*, p. 321).

"Very scarce. Completely revised edition, based on Lenz's *Mineralogisches Taschenbuch* (Erfurt, 1798-9). Brunner's mineralogical system offered little that was either new or interesting. Typical of the period, the external characters play a great part, and the chief divisions are Earths, Salts, Bitumens and Metals. The first of these is subdivided according to structure into earthy or powdery, fine bladed, leafy, star-like, fibrous, fine-grained and dense or compact. The salts are split according to their taste into sour and sweet assemblages. The volume begins with discussions of color, external form, fracture, and luster. An overview of the system is then presented, followed by the complete system including a section devoted to new minerals. The book concludes with an index to minerals mentioned."—Schuh, *Mineralogy & Crystallography: A Biobibliography, 1469 to 1920* (in progress), 906—(Schuh describes this as a second edition — of the *Versuch eines neuen Systems der Mineralogie* (1800) — but I am not entirely sure of that).

Very good copy of a very rare book.

33. BURGSDORF, Friedrich August Ludwig von. Forsthandbuch. Allgemeiner theoretisch- praktischer Lehrbegriff sämtlicher Försterwissenschaften; auf Seiner Königlichen Majestät von Preussen

allerhöchsten Befehl abgefasst. One folding handcolored engraved plate & 9 folding printed tables (3 of which are included in the pagination). lvi, 786 pp. 8vo, cont. half-sheep & paste-paper boards (light foxing), spine gilt, contrasting vellum lettering piece on spine. Frankfurt & Leipzig: 1792.

The unauthorized reprint of the second edition of this classic work. The first edition appeared in 1788 and the second authorized edition was published by the author in 1790 in Berlin. Due to the enormous success of this book, it was pirated and published again in Frankfurt and Leipzig, without any publisher named, in 1792. There were later editions, authorized and pirated, through a fifth edition in 1812 and a French translation.

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

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

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

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

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

34. [BUSSON-DESCARS, Pierre]. *Essai sur le Nivellement*. Nine folding engraved plates. 2 p.l., 218 pp. 8vo, cont. marbled calf, flat spine nicely gilt. Paris: Firmin-Didot & Delance, 1805. \$1500.00

First edition, and a very pretty copy, of this popular work on surveying which saw a second edition in 1813. The book was written upon the retirement of Busson-Descars (1764-1825), who had spent 25 years as a practicing engineer and surveyor. He describes a number of surveying instruments, including several of his own invention. The plates are particularly well-engraved and depict in 68 figures various parts of surveying instruments and methods of surveying. Fine copy.

35. CALVER, Edward Killwick. *The Conservation and Improvement of Tidal Rivers, considered principally with Reference to their Tidal and Fluvial Powers.* Three hand-colored maps on one large folding lithographed plate & diagrams in the text. x, 101, [1] pp. 8vo, orig. blindstamped cloth,

upper cover stamped in gilt. London: J. Weale, 1853.

\$650.00

First edition. "In his thirty-six years as a coastal surveyor, Calver devoted himself to studying the action of tides, waves, and running water on tidal harbors and sea works. His views were published in this book, which anticipates many of the principles later employed in the engineering and construction of artificial harbors and other such works. His remarkably accurate predictions as to the result of such works by others also appear here."—Roberts & Trent, *Bibliotheca Mechanica*, p. 60.

Calver (1813-92), was a fellow of the Royal Society and Institution of Civil Engineers.

Fine fresh copy. Booklabel of "Bethune of Balfour" on verso of title. Embossed stamp of the Franklin Institute in blank portion of title with its bookplates on front pastedown. Ex Bibliotheca Mechanica.

36. CAMBOIS, J.P. *Essai sur les Épanchemens de Sang dans la Poitrine*. 23 pp. Large 4to, orig. marbled wrappers. Paris: Didot jeune, 1815.

\$250.00

First edition and very rare with no copy in OCLC. Cambois describes the problems of thoracic bleeding created by external causes. He discusses how to identify and treat bleeding in the chest.

Fine copy.

37. CANCRIN, Franz Ludwig von. *Kurzer Entwurf der Grubenbaukunst*. Engraved vignette on general title & 57 folding engraved plates. 6 p.l., 244, [16] pp. 8vo, cont. boards covered with blue-green paper (some worming in gutter, occasional unimportant dampstaining). Frankfurt am Main: Andrea, 1774. \$1500.00

First edition. Cancrin (1738-1812), was an engineer and high government official, both in Germany and in Russia where he was recruited by Catherine II to manage the Staraya Russa saltworks. "Despite the press of his civil offices, Cancrin found time (1773-1791) to write an encyclopedic work in twenty-one volumes that covered all aspects of the mining of metals and salt — including mineralogy, assaying, mathematics, and mechanics. This work brought him a European reputation."—D.S.B., III, pp. 41-42.

The present work is Part V of the above-mentioned *Erste Gründe der Berg und Salzwerkskunde*. This is a richly illustrated work on methods of digging and constructing mines. The plates depict the different kinds of shafts which could be established, the tools used to dig the shafts and remove metals and their ores, methods of securing the shafts, etc.

Good copy, lacking the sectional title. Light dampstaining. From the library of

His Serene Highness Prince Fürstenberg at Donaueschingen.

Poggendorff, I, 370.

38. CANCRIN, Franz Ludwig von. *Anleitung zur Scheide oder Aufbereitungskunst der Mineralien*. Engraved vignette on general title & 21 folding engraved plates. 5 p.l., 158, [8] pp. 8vo, cont. boards covered with blue-green paper (light foxing). Frankfurt am Main: Andrea, 1782.

\$1250.00

First edition. The present work is Part VIII of the above-mentioned *Erste Gründe der Berg und Salzwerkskunde* and is a complete work on the extraction of metals from ore.

Fine copy. From the library of His Serene Highness Prince Fürstenberg at Donaueschingen.

Poggendorff, I, 370.

39. CANCRIN, Franz Ludwig von. *Entwurf der Salzwerkskunde*. Engraved vignette on general titles, 52 folding engraved plates, & three folding printed tables. 8 p.l., 270, [26] pp.; 5 p.l., 284, [18] pp.; 5 p.l., 210, [20] pp. Three parts in one vol. 8vo, cont. boards covered with bluegreen paper (some dampstaining, light foxing). Frankfurt am Main: Andrea, 1788-89-89. \$1750.00

First edition. The present work is Part X of the above-mentioned *Erste Gründe der Berg und Salzwerkskunde* and is a complete work on salt mining and refining. Very good set. From the library of His Serene Highness Prince Fürstenberg at Donaueschingen.

- Poggendorff, I, 370.
- **40. CANFIELD, Thomas Hawley**. [Drop-title]: *Deep Waterways. Subject of a Talk at the Algonquin Club last Evening. Hon. Thomas H. Canfield speaks of the Vast Amount of Business on the Great Lakes and of the value to Burlington of a Ship Canal.* (From the Burlington Free Press). [16] pp. 12mo, stitched as issued. N.p.: n.d [OCLC gives a date of 1890; a contemporary note in pencil on the title states "March 1896"]. \$750.00

First book edition and rare. Canfield (1822-97), a native of Arlington, Vermont, was, by 1850, involved in railroad construction and lake and rail transportation between Montreal, Vermont, and New York. His most important project was probably the construction of the Northern Pacific Railroad. He was tireless in promoting the opening of routes for the transportation of the agricultural and

mineral products of the West to New England, by way of the Great Lakes, St. Lawrence River, and Vermont railroads and canals.

Fine copy, preserved in a box. Ex Bibliotheca Mechanica.

41. CASSINI DE THURY, César François. Description Géométrique de la France. One large folding engraved map of France (short tear to one fold neatly repaired at an early date). 207, [3] pp. Large 4to, 19th cent. calf-backed marbled boards (head of spine a little worn), spine gilt, green morocco lettering piece on spine. Paris: J.C. Desaint, 1783. \$1500.00

First edition. Cassini de Thury (1714-84), known as Cassini III, is most famous for his cartographical work which resulted in the first modern map of France. This is his final work on the subject.

Very good copy. Old stamp on title of the Depot General de la Guerre. *▶ D.S.B.*, III, pp. 107-09.

42. CAUCHY, Augustin Louis. [Drop-title]: "Mémoire sur la Rectification des Courbes et la Quadrature des Surfaces courbes...présenté le 22 Octobre 1832." Pages [3]-15. 4to, later boards. [Paris: Institut de France, Paris, Académie des sciences, *Mémoires*, 1850, Vol. 22]. \$550.00

This seems to be an excerpt from the *Mémoires* of the Paris Académie des Sciences. This is one of Cauchy's most important contributions to calculus in which he describes curves, their rectification, and quadrature.

Fine copy. Rare.

Encaustic Painting

43. CAYLUS, Anne Claude Philippe, Comte de & MAJAULT, Michel Joseph. Memoire sur la Peinture a l'Encaustique et sur la Peinture a la Cire. Fine engraved frontis. & two engraved plates. 4 p.l., 133 pp. 8vo, fine cont. crushed morocco, spine finely gilt, foot of spine signed "Oesterreich," 19th-cent. green morocco lettering piece on spine. Geneva: Pissot, 1755. \$2000.00

First edition of this work on encaustic and wax painting. "The name *encaustic* (from the Greek for 'burnt in') is applied to paintings executed with vehicles in which wax is the chief ingredient . . . Modern paintings in wax, in their chromatic range and in their general effect, occupy a middle place between those executed in oil and in fresco."—*Encycl. Brit*. The ancient Egyptians, Greeks, and Romans

commonly employed wax as a vehicle for painting.

In the 18th century, several men became interested in encaustic painting; they included Count Caylus (1692-1765), the distinguished expert in classical art; Majault, a physician and chemist; J.J. Bachelier, a painter; Chevalier Lorgna; and Antonio Paccheri, another painter.

"About the year 1755 further experiments were made by Count Caylus and several French artists. One method was to melt wax with oil of turpentine as a vehicle for the colours... Count Caylus's method was different, and much simpler: 1. the cloth or wood designed for the picture is waxed over, by rubbing it simply with a piece of beeswax; 2. the colours are mixed up with pure water; but as these colours will not adhere to the wax, the whole ground must be rubbed over with chalk or whiting before the colour is applied; and 3. when the picture is dry it is put near the fire, whereby the wax is melted and absorbs the colours. It must be allowed that nothing could well be simpler than this process, and it was thought that this kind of painting would be capable of withstanding the weather and of lasting longer than oil painting. This kind of painting has not the gloss of oil painting, so that the picture may be seen in any light, a quality of the first importance in all methods of mural painting."—Encyc. Brit.

Fine and handsome copy.

44. CHANTOURELLE, P.N. Essai sur quelques Maladies des Articulations, et principalement sur le Tumeurs blanches. 32 pp. Large 4to, attractive modern marbled wrappers. Paris: Didot jeune, 1814. \$225.00

First edition of this scarce monograph on arthritis and joint diseases. Chantourelle describes in great detail tuberculosis of the joints, otherwise known as tumor albus. A substantial portion of the text is devoted to methods of treatment.

Fine copy.

The First Bridge to Cross the Missouri River

45. CHANUTE, Octave & MORISON, George Shattuck. *The Kansas City Bridge, with an Account of the Regimen of the Missouri River, and a Description of Methods used for founding in that River*. Five tinted lithographed views & 12 folding lithographed plates. 1 p.l., 140 pp. 4to, orig. cloth (extremities a little worn), upper cover stamped in gilt. New York: Van Nostrand, 1870. \$1250.00

First edition. "Chanute's rail and road bridge, opened 1869, was the first to cross the 'turbulent and unstable' Missouri River. It presented unprecedented construction problems, particularly in the founding of the piers, and Chanute felt that the resulting knowledge should be made available to other engineers.

His book thus gives a detailed account of the history of the bridge, its design and erection. The superstructure consisted of five main spans varying from 130 to 248 feet made up of composite timber and iron trusses with a pivoting navigation span, 361ft in length, in the form of a wrought-iron Pratt truss. The clear and informative text is enhanced with a series of excellent illustrations of the work in progress and plans and sections of caissons, floating derricks, dredgers, falsework etc. The bridge is also of interest in that it was the first structure that George Morison worked on."—Elton, Cat. 12, 68.

Chanute (1832-1910), born in Paris, came to America as a boy. He enjoyed a very successful career as a civil engineer and was also notable for his work in aerial navigation, having conducted the first gliding experiments made in the United States.

Very nice copy. Ex Bibliotheca Mechanica.

▶ D.A.B., II, pp. 10-11.

46. CHAPMAN, **William**. *Report on the Harbour of Scarborough; and on the Means Necessary for its Improvement*. One folding engraved plan of the harbor (a little foxed). 32 pp. Small 4to, attractive modern half-calf & marbled boards, spine gilt, red morocco lettering piece on spine. Scarborough: G. Broadrick, 1800. \$1350.00

First edition and very rare; OCLC locates no printed copy. Chapman (1749-1832), an intimate of Watt and Boulton, was one of the leading civil engineers of his time. He was in charge of the construction of the Kildare Canal and consulting engineer to the grand canal of Ireland. In conjunction with Rennie, he was engineer of the London Docks and of the south dock and basin at Hull. Chapman was also responsible for improving many harbors.

Fine copy of a nice provincial imprint. Faint stamp on second leaf of the Free Public Library of Wigan. Ex Bibliotheca Mechanica.

▶ D.N.B., IV, pp. pp. 57-58.

47. COBBETT, William. The Woodlands: or, A Treatise on the preparing of ground for planting; on the planting; on the cultivating; on the pruning; and on the cutting down of Forest Trees and Underwoods...the Trees being arranged in Alphabetical Order... Three woodcut illus. in the text. [344] pp. incl. final leaf with ads. 8vo, attractive early 20th-cent. half marbled calf & marbled boards, spine gilt, contrasting morocco lettering pieces on spine, uncut. London: Printed & Published by William Cobbett, 1825.

\$950.00

First edition of one of Cobbett's most notable agricultural writings, based on his own experiences as a working farmer and on his famous "Rural Rides" which

he took from 1821 to 1826, where he rode through most of the southern counties of England, listening and learning from farmers and foresters.

"General directions fill the first quarter, as far as section 91; then come 'The Trees, arranged in alphabetical order, with the instructions relative to each', up to section 601. The order is that of the common English names, each with its botanical characteristics and generic description, then the individual species, beginning with the native or main one, with details of its cultivation, followed by the others, with notes on specific differences. American trees are well to the fore, reflecting Cobbett's zeal in importing them."—Raphael, *An Oak Spring Sylva*, 46.

Fine copy.

Marey Attacked

48. COUGHTRIE, —, **Prof**. Aërial Locomotion. Pettigrew versus Marey...[Reprinted from the Quarterly Journal of Science, April, 1875.]. 20 pp. 8vo, disbound. London: 1875. \$750.00

First edition of this very rare pamphlet concerning priority regarding their rival theories of flight, which are, according to the author, essentially the same. Prof. Coughtrie states that James Bell Pettigrew (1834–1908), the comparative anatomist at the University of St. Andrews, announced his theory on the fundamental features of flight before Marey.

Fine copy, preserved in a calf-backed folder. Ex Bibliotheca Mechanica.

49. COULOMB, Charles Augustin. "Observations théoriques et expérimentales sur l'effet des Moulins à vent, & sur la figure de leurs ailes." Pages 65-81 of the *Mémoires* of the Académie Royale des Sciences. Large 4to, attractive antique calf-backed marbled boards, spine gilt, red morocco lettering piece on spine. [Paris: 1781]. \$500.00

First appearance, an extract from the *Mémoires*, read on the 22nd December 1781. This, the first memoir read by Coulomb as a member of the Académie, is his final engineering memoir and is concerned with windmill design.

Fine copy. Ex Bibliotheca Mechanica.

D.S.B., III, pp. 439-47. Roberts & Trent, Bibliotheca Mechanica, p. 81.

50. DELAPORTE, Louis Augustin. *Dissertation sur la Pleurésie*. 20 pp. 4to, modern marbled wrappers. Paris: Didot jeune, 1811. \$250.00

First edition of this rare dissertation on pleurisy. Delaporte discusses the

history of pleurisy, its symptoms and proper diagnosis, causes, varieties, complications, and treatments.

Fine copy.

51. DENIS-DESLONGSCHAMPS, Daniel Casimir. *Dissertation sur la Fièvre inflammatoire ou Angioténique*. 19 pp. 4to, modern marbled wrappers. Paris: Didot jeune, 1815. \$300.00

First edition of this dissertation and very rare with no copy in OCLC. The author was a surgeon in the French Navy and a member of the Société d'Instruction médical of Paris. In this work, Denis-Deslongschamps describes scarlet fever, its causes, symptoms, varieties, methods of diagnosing and treatment.

Fine copy.

Mining in Saxony

52. DIETRICH, Ewald Victorin & WEBER, Gotthold August. *Kurze Uebersicht der Geschichte des Bergbaues im königlich sächsischen Erzgebirge*. *Nach Albinus meissnischer Berg-Chronika im gebrängten Auszuge frei bearbeitet und bis auf die neuesten Zeiten fortgeführt, auch mit einer tabellarischen Uebersicht der freien Bergstädte Sachsens*. Four large folding printed tables. x, [2], 159, [1] pp. 8vo, orig. wrappers (some light dampstaining), uncut. Annaberg: Freyer, 1822.

First edition of this rare history of mining in Saxony. It is based on Peter Albinus' *Meisznische Land und Berg-Chronica* (1589-90), a work of considerable importance. It contains much original information on the life and works of Agricola and on the output of gold and silver, along with details on the magnet-stone, wolfram, and many other metals.

The authors of the present book have greatly revised and updated Albinus' book and have furnished much statistical information on output, etc.

Very good copy.

An Important Bridge Book

53. DOUGLAS, Sir Howard, Bart. Essai sur les Principes et la Construction des Pont Militaires, et sur les Passages des Rivières en Campagne... traduit de l'Anglais par J.P. Vaillant. 13 folding lithographed plates. 2 p.l., 388, [4] pp. 8vo, cont. half-calf & marbled boards, flat spine

nicely gilt, crest of "CL" at head of spine. Paris: Anselin & Pochard, 1824. \$1850.00

First edition in French. "In 1816 Douglas brought out the first edition of his work on military bridges, which is said to have furnished Telford with the idea of the suspension principle in bridge construction."—D.N.B., V, p. 1204. Douglas (1776-1861), had a truly eventful and adventurous life: he was a soldier, scientist, sailor, professor and theoretician of military science, governor of New Brunswick, M.P., etc. (see *D.N.B.* for more on this fascinating and varied man).

The attractive lithographed plates depict various kinds of bridges including a primitive suspension bridge and numerous pontoon bridges.

Fine and pretty copy from the library of Archduke Charles, the nephew and adoptive heir of Duke Albert of Saxe-Teschen with a note that this is a duplicate from the Albertina Library in Vienna. The English edition and our French edition are both scarce books.

54. DREDGE, **James**. *Thames Bridges*. From the Tower to the Source. 77 photo-engraved plates & some illus. in the text. 2 p.l., 255 pp. Oblong 4to, orig. green-half morocco & green patterned cloth (a little rubbed), spine gilt. London: Offices of "Engineering," [1897]. \$1350.00

First edition of this very handsomely illustrated book. "The best and most reliable source book for the many bridges over the Thames. Each one has an excellent description, giving the facts and figures for piers and foundations as well as superstructures, with an historical account of the project. Dredge (1840-96), began his career as a civil engineer, working first in the office of D.K. Clark and then with John Fowler. He later became editor and proprietor (with W.H. May) of 'Engineering' on the death of Zerah Colburn."—Elton, *Cat.* 5, 13.

Fine copy. Ex Bibliotheca Mechanica.

55. **DU CHOISEL, Claude**. *Nouvelle Méthode sure, courte et facile, pour le Traitement des Personnes attaquées de la Rage*. xvi, 23 pp. Small 8vo, attractive modern marbled wrappers (a few page numbers & headlines cropped at top). Paris: H.L. Guerin & L.F. Delatour, 1756. \$450.00

First edition and very scarce. Du Choisel (b. 1717), a Jesuit, served as the apothecary of the mission at Pondicherry in India. In the present work, Du Choisel describes several methods of treating rabies which he learned while in India.

Fine copy.

56. EIFFEL, Gustave. *The Resistance of the Air and Aviation. Experiments conducted at the Camp-de-Mars Laboratory*. Translated by Jerome C. Hunsaker. Frontis., 27 plates, numerous illus. in the text, & a duplicate of plate 26 laid-in a pocket inside the rear cover. xvi, 242 pp. Large 4to, orig. cloth (lower hinge a little cracked). London: Constable; Boston: Houghton Mifflin, 1913. \$500.00

"Second edition, revised and enlarged." Eiffel's important experiments on wind resistance were the last major works of his active career. These experiments and their results were known to the Wright Brothers.

Fine copy. Ex Bibliotheca Mechanica.

57. ELLET, Charles. Report on the Location of the Western Portion of the Baltimore and Ohio Rail-Road, to a Committee of the City Council of Wheeling. 87 pp. 8vo, orig. green printed wrappers. Philadelphia: J.C. Clark, 1850. \$750.00

First edition. In the present work, Ellet acted "as counsel for the City of Wheeling in the controversy between that city and the Baltimore and Ohio Railroad. The dispute arose over the choice of a proper route for the railroad to follow in entering the City of Wheeling... Ellet's share in the controversy... consisted mainly in the publication of three reports [this is the first] sustaining the position of the City of Wheeling. His task was primarily one of consultation, a role commonly fulfilled by engineers of distinction. Ellet's main argument was to prove to the public and to the board of arbiters selected to settle the dispute that the additional longer route, preferred by the company, would be harmful to the interests of the citizens of Wheeling, who had agreed to aid in the construction and maintenance of the railroad."—Lewis, Charles Ellet, Ir. The Engineer as Individualist, pp. 137-38.

Fine copy preserved in a slip case. Ex Bibliotheca Mechanica.

Caused a Sensation

58. ELLET, Charles. The Army of the Potomac, and its Mismanagement; Respectfully addressed to Congress. 19 pp. 8vo, orig. self-wrappers (some careful repairs). Washington: 1861. \$750.00

First edition of this pamphlet which caused a sensation when published. Ellet (1810-62), the "Brunel of America," offers here scathing criticism of General McClellan's competency. "The pamphlet was a forthright exposé of blunders of the high command, which, although unsparing, was impersonal: Ellet knew McClellan could never win the war and gave the reasons why... The remedy, according to Ellet, was to allow McClellan to stay in Washington and defend the

thirty-two fortifications around the area. Let McClellan have his daily reviews and parades, but permit the other generals to command groups of approximately 10,000 each and attack at different places."—Lewis, *Charles Ellet, Jr. The Engineer as Individualist*, pp. 180-81.

Fine copy preserved in a box. Ex Bibliotheca Mechanica.

≈ D.A.B., III, pp. 87-88.

59. EVANS, Anthony Walton White. *Letter of W.W. Evans, Civil Engineer, to the Comptroller, on Plan of Bulkheads and Docks for the City of New York*. **25** pp. 8vo, modern blue wrappers. New York: M.B. Brown, 1881.

First edition and very rare with no copy in *N.U.C.*, OCLC, or RLIN. Evans (1817-86), civil engineer, was responsible for the design and construction of numerous important railroads in South America, New Zealand, and Egypt. He was also known for the successful building of bridges across several torrential rivers in Chile.

In the present work, Evans comes out against the coffer dam system proposed by John E. Walsh for the construction of a bulkhead along the docks of Manhattan; Evans makes a series of his own recommendations. "I have often thought... why poor, old, played-out Syracuse, in Sicily, shows that she had better and greater wharves and piers two thousand years ago than New York ever dreamed of having."—p. 21.

Fine copy. Preserved in a box. Ex Bibliotheca Mechanica.

D.A.B., III, p. 195.

Presentation Copy

60. FAIRBAIRN, William. *On the Application of Cast and Wrought Iron to Building Purposes*. Lithographic tinted frontis., illus. in the text (several full-page), one folding printed table, & two folding lithographed plates. viii, 183 pp. 8vo, orig. blue blindstamped cloth (minor foxing), spine gilt. London: J. Weale, 1854. \$1250.00

First edition of one of the key works in the development of the use of iron in buildings. This is a fine presentation copy, inscribed on the free front endpaper: "The Royal Society of Edinburgh with the Author's Compliments."

Fairbairn (1789-1874), "presents the practical knowledge of his time concerning the use of iron and its combination with other materials in the construction of fire-proof buildings. Among the elements discussed are cast-iron beams and girders, wrought-iron beams, and trellis girders, with Fairbairn's recommendation of the use of wrought-iron beams and joists over cast-iron. The book was popular among engineers, largely because of the experimental data on

strength of materials."—Roberts & Trent, *Bibliotheca Mechanica*, p. 113. The handsome frontispiece depicts the Saltaire Mills near Bradford. Fine copy. Ex Bibliotheca Mechanica.

Taming the Chiana River

61. FANTONI, Pio. Relazione della Visita fatta per ordine di sua Maestà imperiale Leopoldo II. &c. &c. &c. dal matematico Canonico Pio Fantoni nel mese di Giugno MDCCXC. al Canal maestro di Valdichiana e Considerazioni sopra il nuovo Progetto di abbassare il Regolatore di Valiano. Six folding plates (three of which are entirely engraved, two are letter-press, & one is a combination). 52 pp. Large 4to, orig. semi-stiff boards (several of the plates are lightly dampstained). Florence: G. Cambiagi, 1791. \$1650.00

First edition of this attractive and scarce book. Fantoni (1721-1804), served as a hydraulic engineer to the Tuscan court and was a member of the Bologna Scientific Society. The present work describe the engineering works which Leopold II viewed during his visit in June 1790 to the Chiana River. This river rises in the Apennines south of Arezzo and often caused floods in the valley of Chiusi. Until the end of the 18th century, the entire valley from Arezzo to Chiusi was a uninhabitable swamp. The construction of the canal, overseen by Fantoni, moved the watershed some 25 miles father south, so it waters now flow partly into the Arno and partly into the Tiber.

Fine copy in original state.

- № Poggendorff, I, 718. Riccardi, I, 446.4–"Bella ediz. in carta turchina."
- **62. FARRAR, John.** *An Elementary Treatise on Mechanics, comprehending the Doctrine of Equilibrium and Motion, as applied to Solids and Fluids, chiefly compiled, and designed for the Use of the Students of the University at Cambridge, New England.* Ten folding engraved plates. vii, 440 pp. 8vo, orig. cloth-backed boards (foxing), label on spine. Cambridge: Hilliard & Metcalf, at the University Press, 1825.

First edition. Farrar (1779-1853), Hollis professor of mathematics and natural history at Harvard, "was responsible for conceiving and carrying through a sweeping modernization of the science and mathematics curriculum at Harvard College... He brought in the best French and other European writings on introductory mathematics, most of them unknown and unused in the United States."—D.S.B., IV, p. 546.

Apart from the seemingly inevitable foxing, a fine copy. Ex Bibliotheca Mechanica.

63. FERBER, Johann Jakob. *Beyträge zu der Mineral-Geschichte von Böhmen*. Engraved vignette on title, one folding engraved plate, & one large folding handcolored engraved map. [22], 162 pp. 8vo, cont. halfsheep & speckled boards, spine gilt, red morocco lettering piece on spine. Berlin: C.F. Himburg, 1774. \$1500.00

First edition. Ferber (1743-90), the noted Swedish mineralogist, taught at St. Petersburg and Berlin, finally settling in Switzerland. An indefatigable traveler, he wrote several interesting series of letters relating his impressions and observations during journeys in nearly all the European countries.

This is one in an important series of works by Ferber which constructed the foundation for the geological investigation of Austria-Hungary. Part One lists each mining operation in Bohemia. Part Two gives further detailed information about 19 mining works in the area, with much on their operation and production.

Attractive copy. **№** Zittel, pp. 87-88.

"Very Rare"-Sinkankas

64. FEUCHTWANGER, Lewis. A Treatise on Gems, in Reference to their Practical and Scientific Value; a Useful Guide for the Jeweller, Lapidary, Artist, Amateur, Mineralogist, and Chemist; accompanied by a Description of the most Interesting American Gems, and Ornamental and Architectural Materials. Illus. in the text. vi, one blank leaf, 178 pp., one leaf of ads. 8vo, cont. marbled boards (some light dampstaining & foxing to early leaves), very nicely rebacked & recornered with antique calf, spine gilt, red morocco lettering piece on spine. New York: A. Hanford, 1838.

First edition of "the first monograph on gemstones published in the United States and an excellent one at that... In his *Gems and Precious Stones of North America*, the eventual successor to Feuchtwanger, published in 1890, G F Kunz notes that 'Dr. Lewis Feuchtwanger, of New York, was, in 1838, an authority on precious stones, and his book was one of the first to be written on the subject in the United States. During his long residence in this country, he made an interesting and valuable collection of minerals, fossils, and gems, many of the latter being fine specimens.' (p. 322). In regard to the priority of Feuchtwanger's book, I have not found any published earlier and unlike Kunz, conclude that it is the first...

"The text begins with general gemology: properties, chemistry, geology, geographical distribution, enhancement of color, gem setting, cleaning of gems, imitations, commerce, and gems used in optical applications. The second part considers individual gemstones and ornamental materials beginning with the diamond and working through the major and minor species into such rarities

as natrolite, apatite, pyrite, and numerous ornamental stones. Feuchtwanger took special care to record as much information as he could find on native gemstones and the localities that furnished them... Another 'first' of the present work is the extended description of pearls, artificial pearls, and corals, but nothing was said about the freshwater pearls of the United States which apparently were largely unknown at the time... Very rare."—Sinkankas 2081.

Very good copy. Bookplate of Lord Farnham.

65. FITTON, William Henry. A Stratigraphical Account of the Section from Atherfield to Rocken-End, on the South-West Coast of the Isle of Wight. One large folding hand-colored lithographed plate & one large folding printed table. 1 p.l., 289-327, [2] pp. 8vo, cont. green half-sheep & cloth (joints worn). London: R. & J.E. Taylor, 1847.

First separate edition, originally appearing in the *Quarterly Journal* of the Geological Society of London, Vol. III (Aug. 1847). Fitton (1780-1861), a fellow of the Royal Society and a member of the Geological Society, is best known for his contributions to stratigraphy and his elucidation of the succession of the Upper Jurassic and Lower Cretaceous strata of southern England.

In this work, Fitton "demonstrated the existence of a clay, the Atherfield Clay, at the base of the Lower Greensand but clearly different from the Weald Clay because it contained marine fossils and marked the readvance of the sea after a long nonmarine episode; he also provided detailed descriptions of an important section along the southwest coast of the Isle of Wight and discussed the equivalents of the Wealden beds in Europe."—D.S.B., V, p. 14.

The plate depicts geological cross-sections. Errata slip tipped-in.

Very good copy, inscribed by the author on the free front endpaper "To the Royal Geological Society of Cornwall, —from the Author. Per Sir Charles Lemon, Bart." Several library stamps of the Society.

66. FONTANA, Felice. [Drop-title]: *Lettre de M. l'Abbé de Fontana, Physicien du Grand-Duc de Toscane, à M****. 4 pp. Large 4to, unbound, uncut. N.p.: n.d. \$150.00

First separate edition, an offprint from Rozier's *Journal de Physique*. This is a commentary on the discovery by Bonaventura Corti (1729-1813), of cyclosis (the movement of the protoplasm in the cell) along with an account of Fontana's own investigations.

Fontana (1730-1805), was one of the major microscopists of the 18th century. Fine copy. Rare; no copy in *N.U.C.*

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

Third and best edition, containing enlargements to the text and the folding maps and panorama which are not found in the earlier editions. This is a classic work on the early gold and silver mines of Colorado.

Very good.

- Howes F-281.
- **68. FUSS, Bernhard**. *Specimen inaugurale medicum sistens Diaetam Infantum*... 24 pp. Small 4to, self-bound. Basel: E. Thurneysen, 1797.

\$275.00

First edition of this very rare thesis on the diet of infants, defended at the University of Basel. Included are two chapters on dentition. Fuss was a member of the distinguished family of Balois scientists.

Fine copy.

- № Not listed amongst the 213 dissertations listed at the end of Still's *History of Paediatrics*.
- **69. GEUNS, Matthias van**. Abhandlung über die epidemische Ruhr, besonders des Jahr 1783...aus dem Holländischen überzetzt, und mit einigen Anmerkungen begleitet. 367 pp. 8vo, cont. half-vellum & pastepaper boards, contrasting leather lettering piece on spine. Düsseldorf: J.C. Dänzer, 1790. \$1500.00

First edition in German (1st ed., in Dutch: 1784) and very rare. Geuns (1735-1817), took his medical degree at Leyden and spent two years in Paris studying at the Hôtel Dieu and Hôtel de la Charité. Upon returning to Holland, he studied further with Petrus Camper. After establishing a successful practice, Geuns was appointed professor of medical practice, chemistry, botany, and obstetrics at Harderwijk. In 1791, Geuns moved to Leiden where he assumed the chairs of theoretical and practical medicine. He founded a medical society, which today bears his name.

The present work is concerned with an outbreak of dysentery in the province of Gelderland. Geuns describes in great detail the spread of the disease and the efforts taken to suppress it. He provides a number of case histories and pharmaceutical recipes. This German edition contains additional remarks by the translator, Dr. Johann Bernhard Keup.

Fine copy.

Lindeboom, Dutch Medical Biography, cols. 670-72.

70. GIORDANO, Annibale [or Olivier]. *Memorie del Porto di Pesaro*. Finely engraved large vignette on title, one folding engraved map, an engraved headpiece, & one engraved initial. vi, 74 pp. Large 4to, attractive antique calf-backed marbled boards, spine gilt, green morocco lettering piece on spine. Pesaro: Casa Gavelli, 1774. \$750.00

First edition of very rare history of the seaport of the city of Pesaro, situated on the coast of the Adriatic. Giordano (1708-89), was a distinguished antiquary, honorary chamberlain to Pope Clement XIII, and perpetual secretary of the Pesaro Academy. In this work, he describes the port during Roman and medieval times and the reconstruction of the port in 1613-14 which was made possible by the generosity of Francesco Maria II della Rovere, Duke of Urbino. There is much on the art and archeology of the port and engineering matters.

It is interesting to note that there was a reprint of this book published in 2004. Fine copy.

One of the Classic Early Works on Forest Management

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

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

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

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

Draining the Fens

72. GOLBORNE, John. *The Report of John Golborne, Engineer, concerning the Drainage of the North Level of the Fens, and the Outfal of the Wisbeach River*. One folding engraved map. 11 pp. 4to, cont. blue wrappers. N.p.: [Report dated 3 October 1769]. \$1250.00

First edition. The first systematic attempt to drain the Fens, a silted-up bay of the North Sea, north of Cambridge, was made by the Romans. During the next 1500 years there were numerous other attempts at drainage and all were largely unsuccessful.

A resident of Chester, for many years Golborne (ca. 1724-83), "was engineer to the River Dee Company, in which capacity he continued the work in land reclamation and river control begun by Nathaniel Kinderley. He consulted on improvements on the River Weaver Navigation and advised the Forth and Clyde Canal proprietors on the navigation of the rivers Carron and Clyde. Immediately thereafter he was commissioned by the city of Glasgow to prepare a scheme for deepening the Clyde along a length of twelve miles. The results were an outstanding success and on the completion in 1775, Golborne was presented with a silver cup...

"Golborne's report to the General Commissioners concerning the draining of the north level of the fens. Both he and Yeoman reported on the drainage of the North Level in 1769, followed by Grundy's report of 1770. In 1773-1774 Golborne served as consulting engineer when a new cut was made below Wisbeach, which was known as 'Kinderley's Cut' in honor of Nathaniel Kinderley, who first proposed a scheme of this kind in 1721...

"The illustrative map was drawn by a Mr. Elstobb, being engraved and printed in London. By Golborne's admission, this is a preliminary report, giving an estimate of costs but not attempting to determine the course of the new channel."—Roberts & Trent, *Bibliotheca Mechanica*, p. 141.

Fine copy. Rare.

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

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

Gotthard provides interesting chapters on the medical uses of tobacco.

Very good copy. Stamp of Wilhelm Schlösser. Bookplate of Rainer Immensack.

Arents 1151.

74. GRAEFF, Michel Ignace Auguste. [Drop-title]: "Mémoire sur les Expériences relatives à l'Écoulement des Eaux, faites au Réservoir du Furens." Ten lithographed plates (three are double-page). 91 pp. Large 4to, later wrappers. Paris: Imprimerie Nationale, 1882. \$150.00

First edition, a separately issued offprint from the *Mémoires présentés par Divers Savants a l'Acdémie des Sciences de l'Institut National de France*, Vol. XXVIII, No. 2. Graeff (1812-84), was one of the leading hydraulic engineers of his time. The dam which he designed in conjunction with Delocre at Furens (built between 1861-66) was one of the boldest dams in terms of design of the period.

Very good copy preserved in a box. Blank portion of first leaf with perforated stamp of the Franklin Institute Library. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, p. 141-42.

Presentation Copy to Dionysius Lardner

75. GRAHAME, Thomas. A Letter addressed to Nicholas Wood, Esq., on that Portion of Chapter IX of his Treatise on Railroads, entitled "Comparative Performances of Motive Power on Canals and Railroads." 40 pp. 8vo, attractive modern cloth. Glasgow: J. Smith & Son, 1831. \$750.00

First edition, presentation copy, inscribed on the title "To the Revd D Lardner from the Author." "Thomas Grahame, Glasgow merchant, was the last soldier in the struggle to hold the canal system against the overwhelming onslaught of the railways. This letter to Nicholas Wood was published by permission of the Forth & Clyde Canal company for whom Fairbairn was carrying out experiments on increased velocities and improved performances for canal boats. Grahame refers to these experiments during his (convincing) criticism of the chapter in Wood's book which claims for the locomotive superior qualities of working and efficiency and they form part of his argument that Wood had taken 'information at second hand, and instead of testing by practice, judging of practice by theory'."—Julia Elton, Weinreb Cat. 50, 99.

Fine copy. Ex Bibliotheca Mechanica.

76. GUIOT, —. Herrn Guiot Oberaufsehers der Wälder zu Rambouillet kurzgefasstes Forst-Handbuch, in welchem die Beschreibung, Eigenschaften, Nutzen und besondere Erziehung der verschiedenen

Holz-Arten...enthalten...gröstentheils aus des Herrn dü Hamel du Monceau allgemeinen Abhandlung von den Wäldern, herausgezogen. 20 p.l., 480, [16] pp. 8vo, cont. half-sheep & paste-paper boards, spine gilt, contrasting vellum lettering piece on spine. Nuremberg: W. Schwarzkopf, 1771.

\$1350.00

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

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

№ Mantel, I, 11.

77. HAAB, Otto. Atlas und Grundriss der Ophthalmoscopie und ophthalmoscopischen Diagnostik. 86 colored & one black & white plates. ix, 82 pp. & 47 leaves of explanatory text. 8vo, orig. blindstamped cloth, gilt. Munich: J.F. Lehmann, [1900]. \$250.00

Third edition, greatly enlarged, of Haab's popular atlas which first appeared in 1895. There were five editions in German, three in French, and four in English.

Haab (1850-1931), gave us the description of macular pathology. His most important contribution to ophthalmology was the development of the giant magnet for removal of intraocular foreign bodies.

Fine, bright copy.

→ Gorin, History of Ophthalmology, p. 209. Rucker & Keys, The Atlases of Ophthalmoscopy 1850-1950. No edition in Becker Cat.

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

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

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

pages.

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

Mantel, I, 19.

79. HARENBERG, Johann Christoph. *Encrinus seu Lilium Lapideum*. One folding engraved plate. 24 pp., one leaf. Small 4to, modern marbled wrappers (some foxing). [Wolfenbüttel]: 1729.

[bound with]:

—. Epistola Lithologica. 4 leaves. Small 4to. Wolfenbüttel: 1729. \$850.00

First editions, apparently issued together. Harenberg (1696-1774), was professor of church history and political geography at the Collegium Carolinum at Braunschweig and the author of a number of natural history and theological works. A member of the Berlin Academy of Sciences, Harenberg also had strong interest in oriental subjects.

The first work describes fossilized encrinus, an extinct genus of crinoids.

* A.D.B., Vol. 10, pp. 598-99. Poggendorff, I, 1019. II. Hoover 388.

"A Charming and Valuable Book"

80. [HARTE, Walter]. Essays on Husbandry. Essay I. A General Introduction; shewing That Agriculture is the Basis and Support of all flourishing Communities... together with the Defects, Omissions, and possible Improvements in English Husbandry. Essay II. An Account of some Experiments tending to improve the Culture of Lucerne by Transplantation: Being the first Experiments of the Kind hitherto made and published in England. Five engraved plates & numerous attractive woodcuts in the text. xviii, [4], 213, 232 pp. 8vo, cont. calf (upper joint with a short & unimportant crack at head), spine gilt, red morocco lettering piece on spine. London: J. Hinton et al., 1764.

First edition and a very fine copy from the Cullen House library. "A far more outstanding piece of work was written by the Rev. Walter Harte but issued without a signature... Lord Chesterfield wrote of him in the highest terms and Johnson admired his companionable talents... Much of the *Essays in Husbandry* is general discussion, and Harte displays a wide acquaintance with the extensive literature of his subject, both English and Foreign, contemporary and classical... Interest in lucerne had been of long standing even in Harte's day, but it has still to become a plant that is generally grown in this country."–Fussell,

More Old English Farming Books, pp. 45-46.

№ *D.N.B.*, IX, pp. 65-66–"a charming and valuable work. Johnson confessed that 'his [Harte's] Husbandry is good."

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

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

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

• A.D.B., Vol. 10, pp. 659-65.

82. HAÜY, René-Just. Traité des Caractères Physiques des Pierres Précieuses, pour servir a leur détermination lorsqu'elles ont été taillées. Three folding engraved plates. xvi, xxii, 253 pp. 8vo, cont. tree sheep, flat spine prettily gilt, red morocco lettering piece on spine. Paris: Courcier, 1817.

First edition. The French petrographers were far more interested in the mineralogical composition and structure of rocks, without respect to their mode of occurrence, their age, or their origin. It was Haüy who laid the foundation of the mathematical theory of crystal structure. In this work he applied it to the analysis and classification of precious stones.

"Very scarce. A landmark book in the science of gemology, described by Sinkankas (1994) as 'the first determinative gemology worthy of the name.' This book marks a transition from earlier descriptive lapadaries to works based on scientific studies. The volume describes the crystallography and physical properties of various gemstones, and characterizes how these qualities might be used in identifying a stone, whether rough or cut. To facilitate this an identification table is provided. The three plates show various crystal forms, a Nicholson's hydrometer (used for measuring specific gravity) and other laboratory apparatus for testing electrical properties."—Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920 (in progress), 2128.

In the Introduction, Haüy refers to Henry Philip Hope, the buyer of the blue

diamond of supposed sinister influence known by his name.

Fine and pretty copy.

D.S.B., VI, pp. 178-83. Partington, IV, p. 203.

A Psychiatric Milestone

83. HEINROTH, Johann Christian August. Lehrbuch der Störungen des Seelenlebens oder der Seelenstörungen und ihrer Behandlung. Vom rationalen Standpunkt aus entworfen. One folding printed table. xii, 396 pp.; vi, 385 pp. Two vols. in one. 8vo, cont. speckled half-sheep & paste-paper boards, flat spine gilt, green leather lettering piece on spine. Leipzig: F.C.W. Vogel, 1818.

First edition of the chief work of the famous German psychiatrist Heinroth (1773-1843). "Heinroth was probably the first clinical psychiatrist to sense the need of a unitary concept in psychology — like that of the total personality today. He was probably the first to whom the ideational content of the mentally sick presented not merely a set of aberrations but a psychological process full of meaning."—Zilboorg & Henry, *A History of Medical Psychology*, p. 471.

"There is still a great deal of value in his textbook [the present book], such as the attempt to classify a host of mental diseases, and his shrewd clinical conclusions."—Roback, *History of Psychology and Psychiatry*, p. 279.

Pages 64-170 of Vol. I contain an early and valuable history of psychiatry, from antiquity to the 19th century. Also of interest is the fact that in this book (Vol. I, p. 143) appears for the first time the term "Psychiatrie" as it is still used in Germany.

A very fine and attractive copy.

Garrison-Morton 4926.

84. HELVETIUS, Jean Claude Andrien. *Idée Generale de l'Oeconomie Animale et Observations sur la Petite Verole*. 17 p.l., 388, [8] pp., 1 leaf of errata. 8vo, cont. mottled sheep, spine gilt, red morocco lettering piece on spine. Paris: Rigaud, 1722. \$850.00

First edition and rare. Helvetius (1685–1755), a member of the distinguished family of physicians, was court physician to King Louis XIV and Queen Maria Leczinska and inspector of the French military hospitals in Flanders. He was a member of the academies of sciences of Paris, Berlin, London, and Florence.

This was a popular and successful book with several later editions and an English translation. The first part of the book deals with physiology of the body. The second half of the book is concerned with small pox and methods of

combating it.

Nice copy.

- Bayle & Thillaye, *Biographie Médicale*, p. 224–"Après s'être occupé de la théorie des fièvres intermittentes et continues, qu'il fait dépendre de l'épaississement du sang pour les premières, et du vice de la fermentation de cette liqueur pour les secondes, il propose différents moyens curatifs, tels que la saignée, le vomissement, la purgation." Lindeboom col. 826.
- 85. HENSCHEL, Elias. Von den Blattern und deren Ausrottung. Ein gemeinfasslicher Beytrag zur Belehrung der Unkundigen über diese Kinderseuche, und zur Prüfung aller bisherigen Ausrottungs-Pläne. 8 p.l., 253 pp. 8vo, cont. boards (some dampstaining). Breslau & Leipzig: W.G. Korn, 1796.

First edition of this rare book. Henschel (1755-1839), was a leading physician and obstetrician in Breslau and one of the earliest and most influential supporters of cowpox inoculation in Germany. In this work, Henschel strongly urges the wider utilization of inoculation.

Good copy.

₩ Hirsch, III, pp. 170-71.

Technology & What to Do With It

86. HERMBSTAEDT, Sigismund Friedrich. Grundriss der Technologie oder Anleitung zur rationellen Kenntniss und Beurtheilung derjenigen Künste, Fabriken, Manufakturen und Handwerke, welche mit der Landwirthschaft, so wie der Kameral- und Policeywissenschaft in nächster Verbindung stehen. Fine vignette on final leaf of text. xxxii, 781, [3] pp. of ads. Thick 8vo, cont. paste-paper boards, spine gilt, red leather lettering piece on spine. Berlin: F. Maurer, 1814.

First edition of a very scarce book. "Hermbstaedt's greatest achievement lay in the field of technology... As a member of the Technical Industrial and Trade Commission, Hermbstaedt frequently met industrialists, including many from outside Prussia. Through the publication of his many textbooks, he performed a valuable service for Prussian industry. His *Grundriss der Technologie* (1814), which ran to almost 800 pages, was widely consulted by merchants, factory owners, and officials, who, confronted by the industrialization of Prussia, found themselves obliged to procure precise technical information."—D.S.B., XV, p. 206.

The text describes methods of manufacturing textiles, dyeing and bleaching, paper and leather making, brewing of beer, tobacco making, ceramics, etc., etc. Hermbstädt (1760-1833), the first chemist in Germany to adopt Lavoisier's

views, was professor of technological chemistry at the University of Berlin. Fine copy.

№ Partington, III, pp. 577-80. Poggendorff, I, 1082-83. Ron, *Bibliotheca Tinctoria*, 522–"An extensive 19th-century German textbook on technology. Dyeing, pp. 180-214; textile printing, pp. 214-230; bleaching, pp. 230-234."

87. **HERWIG, Engelhard**. Genauste Beschreibung des in der Herrschaft Schmalkalden üblichen Eisenschmelzens und Schmiedens, nebst einer vorzüglichen Anleitung zum Stahlmachen entworfen und mit einer Nachricht vom Schmieden und Verzinnen der Bleche auf der Kazhütte im Hennebergischen vermehrt. One folding woodcut plate. 34 pp. 8vo, attractive mottled calfbacked speckled boards, spine gilt, red morocco lettering piece on spine. Biedenkopf: J.L. Ickler, 1777. \$950.00

First edition and very rare. Herwig was the iron inspector for Hesse and Darmstadt. In this book, the author describes the latest methods of making iron and steel.

Fine uncut copy.

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

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

Fine copy. Old stamp on verso of title.

89. HOUSSARD, Eugène. *Essai sur les Rechutes, ou Récidives dans les Maladies*. 55 pp. Large 4to, modern marbled wrappers. Paris: Didot jeune, 1815. \$375.00

First edition of this very scarce thesis on the causes of medical relapses, taking into account age, personality, sex, and climate. Houssard (1789-1870), did his internship at the Hôtel-Dieu at Paris. He discusses the illnesses most likely to be subject to relapses and methods of combatting them.

Fine copy.

90. HUMBER, William. A Practical Treatise on Cast and Wrought Iron Bridges and Girders, as applied to Railway Structures, and to Buildings generally, with Numerous Examples, drawn to a Large Scale, selected from the Public Works of the most Eminent Engineers. Fine tinted lithographed frontis. & 58 lithographed plates (numbered 1-57 & 36a) of which 35 are double-page. x, [1], 106 pp., one leaf of errata. Folio, modern half-morocco & marbled boards, spine gilt. London: &E. & F.N. Spon, 1857.

First edition of this handsomely illustrated "survey of the iron bridges erected in the wake of the Britannia Tubular Bridge with the increased knowledge of the material and its behaviour produced by that monumental structure. The work is made up of a series of handsome plates, fully described and analysed, illustrating examples of all kinds of structures, including aqueducts, viaducts and road bridges. A lengthy section is devoted to the Crumlin Viaduct (prototype for many bridges erected overseas), newly opened and built with Warren & Kennard's patent triangular girder. Other examples include some of Joseph Cubitt's bridges on the Great Northern Railway and on the Bute Docks branch of the Rhymney Railway; an aqueduct by McClean on the Cannock Branch of the South Staffordshire Railway; a splendid tubular girder bridge on the Midland Great Western Railway, Ireland, designed by Hemans and constructed by Fairbairn & Sons; Rendel's Sursuttee Bridge on the East India Railway; Thomas Page's Chelsea Suspension Bridge; and a final section on iron girders used for fireproof floors. Altogether a mine of useful information."-Elton, Cat. One, 53.

Humber (1821-81), from 1852 to his death, practiced as a consulting civil engineer. He was engaged in surveying for railway lines and projecting water and drainage works for several towns and sanitary districts, as well as in the construction of works.

Fine copy. Perforated stamp of the Franklin Institute, Philadelphia, on title. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, p. 166.

91. HUSSON, Henri Marie. *Recherches Historiques et Médicales sur la Vaccine*. viii, 134 pp. 8vo, disbound. Paris: Gabon, 1801. \$650.00

Second edition, "augmentée d'Observations pratiques, et de nouvelles Expériences." Husson (1772-1853), took his medical degree at Paris and was sublibrarian of the new École de Santé. He was secretary of the Comité Central de Vaccine and also founded the Comité de Vaccine de Reims. This is one of the best French works on vaccination.

This book was issued with (price: 2 fr. 75 centimes) and without (1 fr. 50

centimes) an engraved frontispiece. This copy does not have the frontispiece. Fine copy.

Meynell, Elinor, The Impact of Smallpox Vaccination on France (2001)

92. HUTTON, William Rich. The Washington Bridge over the Harlem River, at 181st Street, New York City. A Description of its Construction. 26 Albertype plates (several double-page) & 37 lithographed plates (some double-page & quite large). 4 p. l., [5]-90 pp., [4] leaves. Large 4to, orig. cloth (ends of spine worn, cloth a little soiled & tired), upper cover & spine lettered in gilt. New York: L. von Rosenberg, [1889]. \$950.00

First edition of this finely illustrated history of the construction of the Washington Bridge which spans the Harlem River. A two-hinged arch bridge designed by William R. Hutton and Edward H. Kendall, it featured steel arch construction with two 510-foot long main spans and masonry approaches. The construction lasted from the middle of 1886 until the beginning of 1889; the total length of the bridge, including approaches, was 2,375 feet (724 m). The parallel main spans of the steel arch bridge stretched 510 feet (160 m) over the Harlem River, providing 134 feet (41 m) of vertical clearance and 354 feet (108 m) of horizontal clearance.

Good copy. Ex Bibliotheca Mechanica.

93. JACOBI, Karl Gustav Jacob. Canon Arithmeticus sive Tabulae quibus exhibentur pro Singulis Numeris Primis vel Primorum Potestatibus infra 1000 Numeri ad Datos Indices et Indices ad Datos Numeros pertinentes. xl, 248 pp. Large 4to, attractive antique calf-backed marbled boards, flat spine gilt, black leather lettering piece on spine. Berlin: Typis Academicis, 1839.

\$1750.00

First edition of a rare book. It is concerned with primitive roots; "for each prime and power of a prime less than 1,000 it gives two companion tables showing the numbers with given indexes and the index of each given number."—D.S.B., VII, p. 54.

Jacobi (1804-51), spent 18 years teaching at the University of Königsberg where his tireless activity produced amazing results in both research and academic instruction. Jacobi was an essential factor in the revival of mathematics at German universities.

A very fine copy with many edges uncut.

Smith, *History of Mathematics*, I, pp. 506-07.

His First Book

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

\$1500.00

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

A fine copy.

95. JEFFRIES, David. A Treatise on Diamonds and Pearls. In which their Importance is considered: and Plain Rules are exhibited for ascertaining the Value of both: and the True Method of manufacturing Diamonds. 30 engraved plates. 3 p.l., viii, [18], 155, [2] pp. 8vo, cont. speckled calf (light browning), spine gilt, red morocco lettering piece on spine. London: for the Author, 1751. \$1750.00

"Second edition, with large improvements." The first edition appeared in the previous year; according to Sinkankas, the second edition has been "entirely rewritten, considerably enlarged, new section of Brazilian diamonds, also on alternate methods of valuation, diamond cutting in India." (Vol. I, p. 511).

"The first book in English to describe how diamonds and pearls can be evaluated on the basis of the factors of size (or weight) and style of cut, with allowances being made in the case of diamonds where cut stones depart from the 'ideal' proportions that were accepted as standard in Jeffries' time. These proportions are radically different from those now considered acceptable because they were based less on the production of maximum brilliance than on retention of the greatest amount of weight from the cutting of a typical octahedral diamond crystal. The 'ideal' cut in Jeffries' time is a cushion brilliant, 'old mine' cut, with the pavilion much deeper than employed in modern stones. The proportions and facet patterns are shown in the figures on Plate 1 and others following. Also shown are rose cut gems, graduated as before according to size and weight. The text explains the cutting procedure, how the evaluation rules were derived, the importance of imperfections and flaws as affecting price, notes on rough diamonds, previous authors who attempted to establish

valuation rules, and finally, a somewhat similar procedure for the valuation of pearls, with highest values accorded to pearls of closest approach to spherical perfection, luster, etc.... Being understandable in its explanations and providing accurate tables, this work immediately won acclaim."—Sinkankas 3195—(1st ed.). Fine copy.

96. JORDAN, C. Die erleichterte Steinkohlenaussuchung nach Grundsätzen der vorgegangenen Entstehungsereignisse nebst dem regulären Bergbaue auf dieselben im Umfange. viii, 103 pp. 8vo, orig. wrappers, uncut. Vienna: Camesina, 1816. \$650.00

First edition of this rare account of the coal mining industry in Austria. This is a very detailed survey of each mine within the empire, providing details on production, methods of extraction, refining, costs, etc.

Fine copy. Old stamp of the Bibliotheca Smecnensis on title. The OCLC collation is in error.

Expertise Didn't Help the Author

97. JURINE, Louis. Mémoire sur l'Angine de Poitrine, qui a remporté le prix au concours ouvert sur ce subject par la Société de Médecine de Paris, le 31 octobre 1809, et qui fut adjugé le 2 février 1813. 360 (i.e. 362) pp. 8vo, cont. half-sheep & speckled boards (minor foxing), flat spine gilt, orange leather lettering piece on spine. Paris & Geneva: J.J. Paschoud, 1815.

\$850.00

First edition of an important and rather scarce book; it is an extensive monograph on angina pectoris and contains many original observations. "C'est encore aujourd'hui la meilleure monographie que nous ayons sur ce sujet."—Bayle & Thillaye, Vol. II, p. 748.

Jurine (1751-1819), was the most distinguished physician of Geneva of his time. He was called to Paris to treat Madame de Stael during her last illness. It might be noted that Jurine died from angina pectoris.

Very fine copy.

- Evan Bedford Cat. 613. Waller 5231b. Wellcome, III, p. 374.
- **98. JUVILLE, Jean**. Traité des Bandages Herniaires; dans lequel on trouve, indépendamment des Bandages ordinaires, des machines propres à remédier aux chûtes de la matrice & du rectum, à servir de récipient dans le cas d'anus artificiel, d'incontinence d'urine, &c. &c. 14 folding engraved plates (of

which 13 are finely handcolored). 2 p.l., xxxiv, 232, [8] pp. 8vo, early 19th cent. sheep-backed marbled boards, flat spine gilt, contrasting vellum lettering piece on spine. Paris: Belin et al., 1786.

[bound with]:

JALADE-LAFOND, Guillaume. Considérations sur les Bandages Herniaires usités jusqu'a ce jour, et sur les Bandages rénixigrades, ou nouvelle Espèce de Brayer. 14 engraved plates. xii, 104 pp. 8vo. Paris: l'Auteur et al., 1818.

\$1750.00

First editions of two uncommon and attractively illustrated works dealing with hernias and their treatment.

I. Juville was one of the leading designers of the late 18th century of bandages, belts, straps, trusses, etc. for the treatment of hernias and prolapses. Hirsch writes that Juville's books on the hernia are still worth reading today.

The fine plates depict the trusses and bandages of the author's own invention and design. Thirteen of the plates are engraved on fine vellum paper and have been colored very carefully by hand at the time of publication.

II. Jalade-Lafond was director of the orthopedic institute at Chaillot and the author of several works on hernia. The author describes a number of trusses and bandages of his own invention (well-illustrated on the plates). There are many case histories.

Fine copies.

Hirsch, III, pp. 477 & 412.

99. KAESTNER, Abraham Gotthelf. *Anmerkungen über die Markscheidekunst. Nebst einer Abhandlung von Höhenmessungen durch das Barometer*. Four folding engraved plates. 27 p.l., 440, [1] pp. 8vo, cont. decorated boards (some foxing). Göttingen: Bandenhoeck, 1775.

\$950.00

First edition. Kästner (1719-1800), was appointed professor of mathematics and physics at the University of Göttingen in 1756. He remained there the rest of his life, becoming an influential figure through his teaching and writing; Göttingen's reputation as a center of mathematical studies dates from that time.

"Kaestner owes his place in the history of mathematics not to any important discoveries of his own but to his great success as an expositor and to the seminal character of his thought."–D.S.B., VII, p. 206.

This is an interesting work on techniques of mine surveying. It contains many practical problems and their mathematical solutions. The second part is concerned with the measurement of altitude or depth with the barometer.

Fine copy from the Fugger family library.

Poggendorff, I, 1217-18.

An Important Summary of Homoeopathic Therapeutics

100. KAFKA, J. *Die Homöopathische Therapie auf Grundlage der physiologischen Schule. Ein praktisches Handbuch für Aertzte, welche die homöopathische Heilmethode kennen lernen und am Krankenbette versuchen wollen.* xxvi, [2], 948 pp.; xv, 832 pp. Two vols. Large thick 8vo, cont. green morocco-backed green cloth boards (a little dusty & foxed), spines gilt. [Vol. I]: Sondershausen: F.A. Eupel, 1865; [Vol. II]: Gotha: F.A. Eupel, 1869.

First edition of one of the most important summaries of homoeopathic therapeutics of the time. Kafka was a physician in Prague and a member of the German association of homoeopathic doctors. In the present work, Kafka emphasizes the basic tenets of homoeopathy: that the cure of disease is effected by drugs that are capable of producing in a healthy individual symptoms similar to those of the disease to be treated, and that to ascertain the curative virtues of any drug it must be "proved" upon healthy persons — that is, taken by individuals of both sexes in a state of health in gradually increasing doses.

Nice set. Scarce.

American Silk Culture

101. KENRICK, William. Das Americanischen Seidebauers Anweisung. Oder, die Kunst den Maulbeer-Baum und die Seide zu ziehen. Nach dem System von Mehreren aufeinander folgenden Ernten während einer jeden Jahrszeit. Aus dem Englischen in's Deutsche übersetzt mit hinzugefügten Bemerkungen. Und das Ganze mit einem interessanten Anhang versehen. Durch Joel Schelly. One woodcut diagram in the text. viii, 103 pp. 8vo, orig. American binding of sheep-backed green printed boards (browning throughout due to the quality of the paper). Philadelphia: E.Y. Schelly, 1838.

First edition in German, enlarged with the additional text by Joel Schelly. Kendrick (1789-1872), was the son of one of the pioneer nurserymen in America, who had established a nursery in 1790 between Newton and Brighton, Massachusetts.

"By 1823, William had become associated with his father in the enterprise, and for a half a century he was one of a small group of nurserymen who laid the foundations of the fruit industry of the present day...His interests were not entirely centered in nursery and fruit enterprises. At one period he gave considerable attention to silk culture. In 1835 there appeared under his authorship *The American Silk Grower's Guide*, which included a discussion of the growing of the mulberry. A second edition was printed in 1839."—D.A.B., V, pp,

341-42.

This German edition was printed for the large and growing German population in Pennsylvania.

A fine copy in the original American binding. Surprisingly rare.

102. (KEPLER, J). *Johannes Kepler. Vier Bücher in drei Theilen... Erster Theil* [all published]. By Edmund Reitlinger & Carl Woldemar Neumann. Edited by C. Gruner. Engraved frontis. port., one photographic plate, hand-colored illus. in the text of Kepler's family arms, two leaves of facsimiles of Kepler's handwriting, & several woodcut illustrations in the text. xvi, 224 pp., 2 leaves of ads. 8vo, cont. green blind- & gilt-stamped green morocco, a.e.g. Stuttgart: C. Grüniger, 1868. \$1250.00

First edition of the first part of a projected grand Kepler biography, "further parts of this finely produced and much cited biography were not published."—Caspar, p. 138, no. 73 (in trans.).

Very fine and handsome copy.

103. KOBELL, Franz von. *Ueber die Fortschritte der Mineralogie seit Hauy*. 26 pp. Large 4to, orig. wrappers. Münich: J. Lindauer, 1832. \$350.00

First edition. "Rare. Reviews developments in mineralogy from 1801[?] to 1830."—Schuh, *Mineralogy & Crystallography: A Biobibliography, 1469 to 1920* (in progress), 2730. Kobell (1803-82), was the professor of mineralogy at the University of Münich and a prolific author, both of scientific works and poetry. Fine copy.

104. KOECKER, Leonard. *An Essay on the Diseases of the Jaws, and their Treatment; with Observations on the Amputation of a Part or the whole of the Inferior Maxilla: tending to prove that such Operation is seldom, if ever, Necessary.* Two lithographed plates (one hand colored). 1 p.l., 95, [1] pp., [2] pp. of ads. 8vo, orig. blue boards (neatly rebacked in grey paper, corners rounded), uncut. London: T&G. Underwood; Philadelphia: H.C. Carey & T. Lea, 1828.

First edition. Koecker (1785-1850), a native of Bremen, went to Baltimore in 1807 and "settled there as a dentist and soon developed a lucrative practice on the basis of his adeptness and his courteous manners...[He was] an early advocate of the theory of odontogenic focal infections."—Hoffmann-Axthelm,

History of Dentistry, p. 274.

Very nice copy. Bookplate of the Medical Society of the County of Kings with stamp on title and on verso of the plates.

* Weinberger, Dental Bibliography, pp. 78-79.

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

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

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

One of the Most Complete Works on Fire Prevention to Appear in Germany in the 18th Century

106. KRUEGELSTEIN, Johann Friedrich. *Vollständiges System der Feuerpolizeywissenschaft*. Two folding engraved plates & several woodcut diagrams in the text. vi, [2], 666, [1] pp.; 4 p.l., 699, [1] pp.; vi, [2], 592 pp. Three vols. 8vo, cont. half-sheep & boards, spines gilt, red & green morocco lettering pieces on spines. Leipzig: Voss, 1798-99-1800.

\$1950.00

First edition of one of the most complete treatises on methods of fire prevention to appear in Germany in the 18th century. The author describes methods of constructing fire-proof buildings, materials which are flammable and non-inflammable, chemicals which could fire-proof building materials, the need for securely erected heating and cooking apparatus as well as safe lighting. There is also a discussion of the economic harm caused by fires, fire insurance, etc. Krügelstein stresses the need for city regulations to be imposed regarding building codes and fire brigades.

The second half of Vol. III is devoted to descriptions of many types of fire wagons and trucks, pumps, etc. including those manufactured in France and England. The author provides a history and bibliography on fire trucks. The

attractive plates depict several fire trucks with pumps.

The author was a physician and town official at Ohrdruf.

Fine and handsome set. From the library of His Serene Highness Prince Fürstenberg at Donaueschingen.

107. KURR, Johann Gottlob von. Grundzüge der ökonomisch-technischen Mineralogie. Ein Lehr- und Handbuch für Oekonomen und Gewerbsmänner, sowie für Real-, Gewerbs-, land- und forstwirthschaftliche Anstalten. Six folding engraved plates. xxii, 433, [1] pp. 8vo, cont. half-sheep & marbled boards, flat spine gilt. Leipzig: Baumgärtner, 1836. \$950.00

First edition. "Very scarce. Kurr prepared this work as both a text book and reference work to mineralogy. It begins by defining the purpose and use of the science and giving reasons why it should be studied. The first part describes Oryktognosie or the physical and chemical characters of minerals, including crystallography, fracture, cleavage, hardness, specific weight, transparency, color, etc. This is followed by a systematic mineralogy that divides the species into: combustible minerals that don't contain metals, which are then divided by organic versus inorganic origins, minerals that contain 'light' metals, including the precious stones, epidote, tourmaline, etc., and minerals that contain 'dark' metals, including rutile, tantalite, wolframite, zincite, etc. A long section describing Geognosie follows the descriptive mineralogy. An index concludes the work."—Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920 (in progress), 2548.

Kurr (1798-1870), was professor of mineralogy and botany at the Polytechnic School of Stuttgart.

Fine copy. Not in OCLC.

The "Ganguillet-Kutter Formula"

108. KUTTER, Wilhelm Rudolph. *The New Formula for Mean Velocity of Discharge of Rivers and Canals...* translated from Articles in the 'Cultur-Ingénieur' by Lowis D'A. Jackson. Folding lithographed frontis. & one lithographed plate. Numerous tables in the text. x, [1], 95, cxl pp. 8vo, orig. blue cloth (a little tired, upper hinge cracked but very strong), spine gilt. London: E. & F.N. Spon, 1876.

First edition in English. "The present work first appeared in German in 1870, and was immediately translated into French, Dutch, and Italian. The text is divided into two chapters, the first on flow in open channels generally, and the second on the flow in open channels in earth. This is followed by three tables which give the coefficients of mean velocity of discharge, discharges and mean velocities per second, with a supplementary table of percentages for certain

sections. The two plates at the end [actually, at the front] illustrate the trapezoidal sections of channels adopted in the tables and the diagram of coefficients of mean velocity."—Roberts & Trent, *Bibliotheca Mechanica*, p. 188.

Kutter (1818-88), the Swiss engineer, worked under Emile Oscar Ganguillet (1818-1894) at the Department of Public Works at Bern. Kutter, who was already interested in channel resistance, tested Humphreys' and Abbot's formula, comparing its indications with measurements on Swiss mountain streams. His conclusion was that their formula was limited to relatively gentle slopes and that roughness would need to be taken into account. With Ganguillet, Kutter conducted many experiments in mountain streams, determining constants, and proposed mean values for the degree of roughness to be factored into their "generalized" formula for channel resistance.

Very good copy. Ex Bibliotheca Mechanica.

Rouse and Ince, History of Hydraulics, pp. 177-79.

109. [LABELYE, Charles]. The Present State of Westminster Bridge. Containing a Description of the said Bridge, as it has been ordered into Execution by the Right Honourable, &c. the Commissioners appointed by Parliament, and is now carrying on. With a True Account of the Time already Employed in the Building, and of the Works which are now done. In a Letter to a Friend. 30 pp., 1 leaf of ads. 8vo, modern half-calf (title soiled). London: J. Millan, 1743.

First edition. The Westminster Bridge was the first major bridge built over an English river for more than a century; consequently, it attracted much attention. Construction commenced in 1738 and the choice of the architect — Labelye — was a controversial one. That a youthful architect from Switzerland was chosen gave offense to the established English architects. His methods of construction were considered novel: Labelye laid foundations in caissons which were "huge wooden tanks, open at the top, eighty feet by thirty feet, constructed on shore, floated into position, and then sunk until the bottom rested on the bed of the river, a cavity having been previously excavated for their reception. The pier was then built in the caisson, and when it had reached above the level of high water the sides were removed."—D.N.B., XI, p. 365.

This pamphlet, dated 8 December 1742, describes the work completed — 12 of the 14 piers — and the author defends himself against his numerous critics. Very good copy. Ex Bibliotheca Mechanica.

110. LAFORGUE, Louis. *Dissertation sur la première Dentition, ou l'on provue que la Croissance et la Sortie des Dents ne causent aucune Maladie aux Enfans*. **32** pp. 8vo, stitched as issued, uncut. Paris: l'Auteur, 1809.

\$1750.00

First edition of this rare work on first dentition in which the author rejects the theory that eruption is a cause of infant diseases. Laforgue was, according to Hirsch, one of the most famous dentists of his time in Paris and the author of a number of notable dental works.

Fine copy.

№ Hirsch, III, p. 649. Poletti, *De Re Dentaria apud Veteres*, p. 113. Hoffmann-Axthelm, *History of Dentistry*, pp. 216, 254, 282, 287, 293, 311, 313, 328, 362, & 401.

111. LAGRANGE, Joseph Louis, Comte. *De la Résolution des Équations numériques de tous les Degrés*. viii, 268 pp. Large 4to, fine antique half-calf & marbled boards, spine gilt, contrasting leather lettering piece on spine. Paris: Duprat, An VI [1798]. \$1500.00

First book edition of these two papers, originally published in 1769 and 1770 in journals, containing for the first time a fine historical introduction and followed by numerous notes. In this work, Lagrange "gives the method of approximating to the real roots of an equation by means of continued fractions, and enunciates several other theorems... He also here explains how the equation whose roots are the squares of the differences of the roots of the original equation may be used so as to give considerable information as to the position and nature of those roots."—Ball, A Short Account of the History of Mathematics, p. 411.

Lagrange also gives here a proof that every equation must have a root, a theorem which before this usually had been considered self-evident.

Fine copy.

▶ D.S.B., VII, pp. 559-73.

112. LAMOUREUX, François. *De la Dysenterie, considérée dans son état de simplicité et dans ses complications avec les Fièvres inflammatoire, bilieuse et adynamique*. 34 pp. 4to, modern marbled wrappers. Paris: Didot jeune, 1815. \$275.00

First edition of this rare work — no copy in OCLC — on dysentery. Lamoureux, a member of the Société d'Instruction Médicale of Paris, describes the kinds of dysentery and the complications which can arise from the syndrome. There is much on military medicine.

Fine copy.

Epidemics in Rome

113. LANCISI, Giovanni Maria. Dissertatio De Nativis, deque Adventitiis Romani Coeli Qualitatibus, cui accedit Historia Epidemiae Rheumaticae, quae per hyemem Anni MDCCIX. vagata est. Engraved vignette on title. 8 p.l., 258, [20] pp. 4to, cont. vellum over boards (small repair to blank portion of the title, minor foxing). Rome: F. Gonzaga, 1711. \$1750.00

First edition of an important work on public hygiene and the nature of epidemics in Rome. "Public health and epidemiology were also primary interests of Lancisi, and in this work he deals with the health conditions of Rome, its water supply, climate, etc. In the second part he describes the devastating epidemic of influenza which started in Italy in 1709 and swept over most of Europe."—Heirs of Hippocrates 446.

Because of the influenza epidemic of 1709, Lancisi proposed a series of hygienic measures which were very forward-looking for their time. He also regarded it as the duty of the government to oppose forest destruction, because trees with tall trunks improve the quality of the air.

Very good copy.

№ Osler 3149. Waller 5543. Wellcome, III, p. 441.

114. LANGSDORF, Karl Christian von. Erläuterungen über die Kästnerische Analysis des Unendlichen... worinn zugleich die hyperbolische Logarithmen der Zahlen 1—500 in 13 Decimalstellen enthalten sind. One folding engraved plate. xvi, 207, [1] pp. 8vo, cont. decorated boards (some foxing). Giessen: Krieger, 1778. \$1250.00

First edition of this rare work on calculus and infinite series; it contains "eine merkwürdige Theorie des Raumpunktes und sonderbare Überlegungen über Differentiale und andere infinitisemale Grössen sowie über das Kontinuum."—*N.D.B.*, XIII, p. 612. Langsdorf (1759-1834), was professor of mechanics at the University of Erlangen and later was professor of mathematics and technology at the University of Wilna. He wrote a number of important books on hydraulics, mathematics, and mechanics.

Fine copy. This is one of the author's earliest publications. Laid-in at end is a cancelland for pages 207-08.

Poggendorff, I, 1372-73.

Developing a French Cotton Industry

115. LASTEYRIE DU SAILLANT, Charles Philibert, Comte de. *Du Cotonnier et de sa Culture, ou, Traité sur les diverses espèces de Cotonniers, sur*

la possibilité et les moyens d'acclimater cet arbuste en France, sur sa culture dans différens pays, principalement dans le midi de l'Europe, et sur les propriétés et les avantages économiques, industriels et commerciaux du Coton. Three folding engraved plates & one folding printed table. 8vo, cont. green moroccobacked paste-paper boards, flat spine prettily gilt. Paris: Arthus-Bertrand, 1808.

[bound with]:

PARIS, Jean Joseph. Mémoire sur la Culture comparative de diverses Espèces de Cotonniers. One large folding printed table. 78 pp. 8vo. Paris: Huzard, 1810. \$2000.00

First editions and very prettily bound copies. During the years of the Napoleonic wars, France was forced, because of uncertain supply lines, to develop new sources for essential materials like sugar and cotton. These two works are concerned with the development of a successful indigenous cotton industry in France.

I. Lasteyrie (1759-1849), agronomist, industrialist, and philanthropist, was much involved in modernizing the agricultural techniques practiced in France. He was also interested in lithography and was, in large part, responsible for making Paris the lithographic center of the world. He traveled widely throughout Europe and Britain studying the latest agricultural techniques.

In the present work, the author describes the methods of cultivating cotton in other parts of the world including Italy, Egypt, China, and America. The three plates depict cotton plants and spinning wheels.

II. Paris (d. 1824), wrote many works on agricultural subjects. This is a very rare book with no copy in *N.U.C.*, OCLC, or RLIN.

№ I. Musset-Pathey, Bibliographie Agronomique, 523.

His First Book

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

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

The present book is concerned with the maintenance, ecology, harvesting, and

restocking of forests.

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

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

117. LECCHI, Antonio. *Trattato de Canali navigabili*. Finely engraved vignette on title. 8 p.l., 240 pp. Large 4to, orig. semi-stiff boards, uncut. Milan: G. Marelli, 1776. \$1500.00

First edition of this very attractive book. "The system of canals that served the city of Milan... is the outstanding accomplishment in hydraulic engineering as applied to the construction of artificial waterways in [Italy] during the 15th and 16th centuries," writes W. B. Parsons. Lecchi's 'Trattato' is a history of inland navigation in Italy and particularly Milan. Compiled from manuscript records, it is one of the most reliable printed sources on the subject and was written at a time when the canalization of the Adda, which would complete the through route from the Martesana Canal to Lake Como-Lecco, was yet again under consideration. Much of Lecchi's work, therefore, is concerned with the long history of this project, of which the Martesana, opened in the 1460s, was the first stage...

"Of great interest are the sections dealing with the unprecedented, though unexecuted, lock designs of the 16th-century engineer, Giuseppe Meda. Although no plan exists, such a lock was redesigned in 1777, possibly following the accounts here, for the Adda project...

"Lecchi's treatise also provides a critical technical commentary, citing the great works in hydraulic literature of Castelli, Guglielmini, Manfredi etc."–Elton, *Cat.* 2, 102.

Lecchi (1702-76), a Jesuit, was engaged by Pope Clement XIII to be chief engineer of the enormous project of taming a series of rivers in the areas near Bologna, Ferrara, and Ravenna.

Fine copy in original state. Ex Bibliotheca Mechanica.

№ Parsons, Engineers and Engineering in the Renaissance, pp. 367-416. Riccardi, II, 28.

"His Masterwork"

118. LECREULX, François Michel. Recherches sur la Formation et l'Existence des Ruisseaux, Rivières et Torrens qui circulent sur le Globe Terrestre; avec des Observations sur les Principaux Fleuves qui traversent la France, sur les Causes des Changemens qu'ils éprouvent dans leur cours, les moyens de les contenir dans leur lit, d'en tirer avantage pour la navigation... Eight folding engraved plates. xv, 407 pp., one leaf of errata. Large 4to,

modern green half-calf & marbled boards, spine lettered in gilt. Paris: Bernard, 1804. \$950.00

First edition. Lecreulx (1734-1812), was one of the most important civil engineers in France during the late 18th and early 19th centuries. He oversaw the construction of a large number of important bridges and in 1801 was appointed inspector general of bridges and roads. Lecreulx took part in the planning of most of the chief public works programs during the years of the Empire.

This work is a comprehensive theoretical and practical treatise on river control. The excellent plates depict various techniques of damming, embankment, construction of locks, etc.

Very good copy. Rare. Embossed and perforated stamps of the Franklin Institute on title. The same embossed stamp reappears here and there. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 201-02—"His masterwork."

119. LEONHARD, Karl Cäsar von. Naturgeschichte des Mineralreiches. Ein Lehrbuch für öffentliche Vorträge, besonders in Gymnasien und Realschulen, so wie zum Selbst studium. Two engraved plates (one is finely handcolored). xiv, [2], 360 pp. 8vo, cont. marbled boards (lower edges somewhat worn), red leather lettering piece on spine. Heidelberg: J. Engelmann, 1825.

First edition and very rare. Leonhard (1779-1862), was professor of mineralogy at the University of Heidelberg. "As a founding editor of the *Taschenbuch für die gesammte Mineralogie*, Leonhard earned a place among the foremost mineralogists of his time. His prolific writings contributed to the rise of popular interest in geology during the nineteenth century."—*D.S.B.*, VIII, p. 245–(describing this as one of his chief books).

This is Leonhard's first introductory textbook to mineralogy and geology which was so influential in the popularization of these disciplines.

Very good copy.

№ Poggendorff, I, 1427. Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920 (in progress), 3004—"Very scarce."

120. LEOPOLD, **Justus Ludwig Günther**. *Handwörterbuch des Gemeinnützigsten und Neuesten aus der Oekonomie und Haushaltungskunde*. 1 p.l., xiv, 544, 54 pp., 1 leaf of ads. 8vo, cont. half-calf & boards, flat spine gilt, red morocco lettering piece on spine. Hannover: Hahn Brothers,

1805. \$950.00

Second edition, enlarged with a new foreword and appendix. This is a very extensive dictionary concerned with agriculture and economics in their widest senses. Leopold, a clergyman, was a member of several notable scientific societies.

Old library stamp on title of the Standeherrschaft, Königsbrück, with release stamp. Stamp on verso of title Sächsische Landesbibliothek Dresden, with release stamp. The first edition appeared in 1801. Both editions are very rare; there is no copy of our second edition in *N.U.C.*

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

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

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

Arents 1351. Poggendorff, I, 1437.

122. LINDEN, Johannes Antonides van der. Selecta Medica, et ad ea Exercitationes Batavae. Woodcut printer's device on title. Title printed in red & black. 6 p.l., 772, [56] pp. Thick 4to, cont. vellum over boards, spine backed with paper. Leyden: J. Elsevir, 1656. \$750.00

First edition. Linden (1609-64), professor of medicine at the University of Franeker and later at Leyden's University, wrote a very important bibliography of medicine as well as a series of notable medical books. The present work contains fifteen passages in Greek with Latin translations (eleven from various Hippocratic works) and one in Latin, each with extensive commentary containing other excerpts.

Fine copy from the Fugger family library of Augsburg.

Hirsch, III, pp. 790-91. Lindeboom 1200-03.

123. LINK, Heinrich Friedrich. *Elementa Philosophiae Botanicae*. Four engraved plates on two folding sheets. 2 p.l., 486 pp. 8vo, cont. halfsheep & speckled boards (slight rubbing), flat spine gilt, orange morocco lettering piece on spine. Berlin: Haude & Spener, 1824. \$950.00

First edition. Link (1767-1851), professor of botany at Berlin and director of the university's botanic garden, "was one of the few German botanists in the early part of the present century who aimed at a general knowledge of plants, and combined anatomical and physiological enquiries with solid researches in systematic botany."—Sachs, *History of Botany*, p. 268n.

"Link was always deeply interested in the philosophical foundations of the natural sciences. Throughout his life he followed critically the various philosophical currents in Germany."—D.S.B., VIII, p. 373.

Fine and pretty copy.

A Classic

124. LISLE, Edward. *Observations in Husbandry*. Fine frontis. port. of the author. xvi, 450, [3] pp. Large 4to, cont. calf (well-rebacked, corners a trifle worn), orig. red morocco lettering piece on spine. London: Printed by J. Hughs, 1757. \$1500.00

First edition of one of the 18th century classics of English husbandry. Lisle (1666?-1722), who lived at Crux-Easton in Hampshire and had estates in Wiltshire and in the Isle of Wight, assiduously gathered information from the leading farmers of all aspects of husbandry. He later added comments based on his own experience. Thomas Lisle, the author's son, reworked his father's materials and, using them, published the present work. Some of the chapter headings include plowing, sowing, manuring, pastures, the garden, water and waters, etc. There is an interesting chapter on the varieties of ploughs and Lisle has provided a two-page glossary of technical terms.

The handsome portrait of Lisle, framed by wheat sheaves and autumnal fruits above a composite vignette of agricultural tools, is particularly fine.

Fine copy. There was a second edition published in two octavo volumes in the same year.

** Fussell, The Old English Farming Books from Fitzherbert to Tull 1523 to 1730, pp. 94-95–"It tells how farming was done by named farmers living in specified places."

A Bird's Eye View The First Book on Aerial Reconnaissance?

125. LOMET, Antoine François, Baron de Foucaux. [Drop-title]: *Mémoire sur l'emploi des Machines aérostatiques aux reconnaissances militaires*

et à la construction des Cartes géographiques. One folding engraved plate. 15 pp. 8vo, modern wrappers. [Paris: Extrait du Journal de l'École Polytechnique, XI.^e Cahier, an 10 (1802)]. \$1350.00

First separate printing of what we believe to be the first book on aerial reconnaissance for military and cartographical purposes. Lomet (1759-1826), engineer and an associate of Napoleon, served in the French army and was one of the first to bring back to France information on lithography. While stationed in Munich during the occupation of Bavaria, Lombert studied the new process of lithography and made a number of prints. Returning to Paris in the beginning of 1808, Lomet "also brought with him examples of lithographs produced in various parts of Germany and offered to share the fruits of his experience in Munich with anyone who was interested."—Twyman, *Lithography* 1800-1850, pp. 47-48.

This is a very rare book with no copy in *N.U.C.*, OCLC, or RLIN.

Fine copy. Stamps of the "Bibliothèque de l'Hirondelle de Paris" and the "Bibliothèque Renand" on title.

№ N.B.G., Vol. 31, cols. 537-38.

126. [LONGRIDGE, Michael]. Specification of John Birkinshaw's Patent, for an Improvement in the Construction of Malleable Iron Rails, to be used in Rail roads; with Remarks on the comparative Merits of Cast Metal and Malleable Iron Rail-ways. One long folding engraved plate. 10 pp. 8vo, attractive modern calf-backed marbled boards (light browning). Newcastle: E. Walker, 1821.

First edition. "John Birkinshaw's 1820 patent for rolling wrought-iron rails in 15ft lengths was a vital breakthrough for the infant railway system. Wrought iron was able to withstand the moving load of a locomotive and train unlike cast iron, used for rails up till now, which was brittle and fractured all too easily...

"The present item, written by Michael Longridge, owner of the Bedlington Works, reprints the text of Birkinshaw's patent specification, gives an account of some earlier experiments in rolling wrought-iron rails and accounts for the form of rail adopted. It is dated February 28, 1821 and by June of that year George Stephenson, despite his own invention (with William Losh) of a cast-iron rail, was actively promoting Birkinshaw's with the result that it was decided to use the Birkinshaw rail for much of the main running line of the Stockton & Darlington railway. The rails were supplied by Longridge who went on to manufacture rails for many colliery railways in the North East of England and to become a partner of Robert Stephenson & Co., the locomotive builders. (See: ROLT, 'George and Robert Stephenson', pp.73-75.)...

"The work is accompanied by a splendid plate showing the rollers, rail sections and the patent rails supporting a train of coal waggons drawn by a horse. This

is the extremely rare first edition (the only copy recorded by Skempton is held by the British Library). It was reprinted in 1822 and again in 1824 (when the horse in the plate was replaced by a locomotive and tender)."—Elton, *Cat.* 13, 165.

Fine copy with a presentation inscription from Longridge on the title. Ex Bibliotheca Mechanica.

Skempton, *British Civil Engineering 1640-1840: A Bibliography*, 857. This book is also catalogued under John Birkinshaw.

Wool in Britain

127. LUCCOCK, John. *The Nature and Properties of Wool, illustrated: with a Description of the English Fleece.* Two folding printed tables. 1 p.l., ii, [3]-360 pp., 1 leaf. 8vo, cont. mottled polished calf (binding with a few abrasions & minor defects, upper joint very slightly cracked), stamp in gilt of "O. Wynne" on upper cover & "Haslewood" on lower cover, Wynne's crest in gilt at head of spine, flat spine gilt, red morocco lettering piece on spine. Leeds: E. Baines, 1805. \$1350.00

First edition. Luccock, described on the title-page as a woolstapler, also wrote two well-known books on Rio de Janeiro and southern Brazil, based on two sojourns there during the years 1808-18 and 1820-25.

The present work is a valuable survey of the wool industry of Britain. The author describes the suitability of each county for raising sheep, judged by the quality of the soil, water, forage, and climate.

This was a popular work with a German translation in 1821.

A very pretty copy and scarce. Contemporary engraved armorial bookplate of Owen Wynne and with his signature on title.

128. MAGNUS, Hugo. *Die Anatomie des Auges bei den Griechen und Römern*. 2 p.l., 67, [1] pp. 8vo, orig. printed wrappers. Leipzig: Veit, 1878. \$350.00

First edition of this interesting historical work on the concepts of the anatomy of the eye during classical times.

Magnus (1842-1907), was professor of ophthalmology at the University of Breslau.

Very fine copy.

₩ Waller 14156. Not in Becker Cat.

His First Publication

129. MAREY, Étienne Jules. [Drop-title]: "Recherches sur la Circulation Sanguine." 16 pp. 8vo, unbound. [Paris: "Extrait de la Gazette Médicale de Paris. — Année 1858"]. \$750.00

A very rare offprint with separate pagination, published while Marey was still an intern at the Cochin Hospital. This work reveals Marey's early and precocious interest in the circulatory system.

Fine copy preserved in a calf-backed box. Ex Bibliotheca Mechanica.

D.S.B., IX, pp. 101-03.

A Strange Book

130. [MARIVETZ, Étienne Claude, Baron de]. Observations sur quelques objets d'utilité publique, pour servir de Prospectus à la seconde Partie de la Physique du Monde, ou à la Carte Hydrographique de la France, & au Traité général de la Navigation intérieure de ce Royaume. 2 p.l., 297, [2] pp. 8vo, cont. polished calf, triple gilt fillet round sides, dentelles gilt, spine nicely gilt, a.e.g., red morocco lettering piece on spine. Paris: Visse, 1786.

\$1500.00

First edition of a rather strange book: it is partly a prospectus (and certainly the longest book prospectus we have encountered) and partly a work of science and economics. Marivetz (d. 1794), the son of an extremely wealthy ice manufacturer in Dijon, went to Paris where he studied the sciences with great zeal. In collaboration with Louis Jacques Goussier, he published *La Physique des Gens du Monde* (1780-87), which ruined him financially (& see the note in *N.B.G.* regarding this work).

Some of the chapter headings are: "Plan d'un nouveau régime pour l'Administration des Ponts & Chaussées," "Observations sommaires sur les Corvées," "Sur la Machine de Marly," "Canal de Berry," "Aqueduc de Maintenon," "Lettre sur la maniere de bâtir des Grecs & des Romains," and "Dérivation de la Loire."

There are two further chapters describing the contents of past and future volumes of *La Physique des Gens du Monde*.

Very fine copy printed on thick paper. Bookplate of Villeneuve-Butel.

"Highly Respected"

131. MARX, Carl Michael. *Geschichte der Crystallkunde*. Ten folding engraved plates (including VIb), one of which is hand-colored. [xiv], 313, [1] pp. 8vo, orig. boards (a little worn & soiled), blue leather lettering

piece on spine. Karlsruhe & Baden: D. R. Marx, 1825.

\$1500.00

First edition. "Very rare. A highly respected work that develops an understanding of concepts in what was then modern crystallography through historical perspective. As a result, the book covers the history of crystallography from ancient times to 1824. The development is told by describing the contributions of the individuals in chronological order. The text is divided into six sections, each representing a specific time period. The first covers the ancient Greek and Roman researches. The others span (2) Albertus Magnus to Robert Boyle, (3) Nicolaus Steno to Johann Henckel, (4) Carl Linné to Jean Baptiste Louis Romé de l'Isle, (5) René Just Haüy to Henry James Brooke, and (6) Abraham Gotthelf Kästner to Friedrich Mohs. The name index lists about 300 researches, whose contributions are described in the text. The plates illustrate various concepts brought forth in the discussion by reproducing recognizable figures from important crystallographic works."—Schuh, Mineralogy & Crystallography: A Biobibliography, 1469 to 1920, 3255.

Marx (1794-1864), was professor of physics and chemistry at the Collegium Carolinum in Braunschweig.

A facsimile reprint was issued in 1970.

Very good copy. Stamp of the British Refractories Research Association on front and rear endpapers and bookplate of J.W. Mellor.

"Un des Plus Habiles Commentateurs d'Hippocrate"

132. MARZIANI, Prosper. Magnus Hippocrates Cous Prosperi Martiani Medici Romani Notationibus explicatus. Opus Desideratum. Engraved vignette port. of Hippocrates on title. 4 p.l., 618 pp., [10] pp. Folio, cont. English speckled calf (rebacked, corners a bit worn). Rome: J. Mascardi, 1626.

First edition of this well-known and extremely successful commentary on the works of Hippocrates; there were four editions over a 90-year period. Marziani (or Martiano) (1577-1622), took his medical degree at Bologna and established a very successful practice at Rome, enjoying a great reputation. "Man besitzt von ihm eine geschätzte, mit einem Commentar versehene Uebersetzung der Werke des Hippokrates."—Hirsch, IV, p. 90–(referring to the present work).

This copy has an attractive English provenance: on the title-page we find the signatures of Thomas Ridgeley ((1667?-1734), independent theologian and Andrew Fletcher of Saltoun (1655-1716), Scotch patriot and book collector. For more on these men, see *D.N.B.*, XVI, p. 1168 and VII, pp. 292-97, respectively. Fine copy.

Bayle & Thillaye, *Biographie Médicale*, I, p. 307–"un des plus habiles commentateurs d'Hippocrate."

133. MENURET DE CHAMBAUD, Jean Jacques. Avis aux Meres sur la Petite Vérole et la Rougeole; ou Lettres a Madame de *** sur la maniere de traiter & de gouverner ses enfants dans ces maladies: Suivie d'une Question proposée à MM. de la Société Royale des Science de Montpellier, relativement à l'Inoculation. viii, 363, [1] pp. 8vo, cont. mottled calf (some spotting), flat spine gilt, red morocco lettering piece on spine. Lyons: Perisse Brothers, 1770.

First edition. Menuret (1739-1815), one of the leading contributors to the *Encyclopédie* on medicine, took his medical degree at Montpellier. Afterwards, he moved to Paris and worked with Bordeu at the Charité Hospital. He was in favor of inoculation and published a number of works on it. This is his most substantial work on the subject.

Good copy.

* Hirsch, IV, p. 167. Kafker, The Encyclopedists as Individuals: A Biographical Dictionary of the Authors of the Encyclopédie, pp. 254-57.

Rent & How to Calculate It

134. MEYER, Johann Friedrich. Grundsätze zur Verfertigung und Beurtheilung richtiger Pacht-Anschläge über alle Zweige der Landwirthschaft für Domainen, Cammern, Gutsbesitzer und Pachtbeamten nebst dazu dienlichen Mustern... Mit einer Vorrede von Albrecht Thaer. Tables in the text. xl, 484 pp. Thick 4to, cont. blue boards (upper joint a little cracked but strong). Hannover: Hahn Brothers, 1809.

First edition of this "masterful work" (*A.D.B.*) on improved methods of establishing correct rental and lease rates in all areas of farming. Meyer (1741-1810), a high government official, was one of the leading lawyers of his time in Germany and the present work put him in the first rank of writers on farm and agricultural management. Meyer considers the kinds of rent which existed in Germany and the assets which could be rented or leased on farms of various sorts.

Fine copy. Duplicate from the Sächsische Landesbibliothek, Dresden with their release stamp.

• A.D.B., Vol. 21, pp. 585-87.

135. MICHELINI, Famiano. Trattato della Direzione de' Fiumi nel quale si dimostrano da' suoi veri principi i modi più sicuri, e meno dispendiosi di riparare a' danni, che sogliono farsi dall' Acque. Nine folding engraved plates. Title printed in red & black. 7 p.l., 151, [1] pp. Small 4to, 18th-cent. speckled English calf (corners a little rounded, some rubbing), red morocco

lettering piece on spine. Florence: Stella, 1664.

\$1500.00

First edition of the only book published by the author during his lifetime. Michelini (1604-65), a friend of Galileo and Castelli, was professor of mathematics at Pisa. He was acknowledged by his contemporaries as an expert on hydraulics and was consulted on such problems as the silting in the Venetian lagoon and control of the Arno at Pisa. He suggested that river beds be protected and repaired by bulkheads filled with stones, and proposed a theory explaining why the current is faster in the middle of a stream than near its banks, relating the velocity of current to the gradient of the river bed.

The present work was a source for Guglielmini's fundamental treatise *Della Natura de' Fiumi* (1697).

Very good copy. Bute bookplate. Ex Bibliotheca Mechanica.

D.S.B., IX, pp. 369-70. Riccardi, II, 156–"Questa bella e rara ediz." Roberts & Trent, *Bibliotheca Mechanica*, p. 224-"This work discusses flow, resistance, flow characteristics of different sorts of rivers, etc. Many of the later chapters are devoted to techniques for altering the course or the flow characteristics of a river, preventing flooding, etc."

136. MILLER, William Hallowes. *The Elements of Hydrostatics and Hydrodynamics*. Five engraved plates. [iii]-viii, 95, [1] pp. 8vo, cont. boards (well-rebacked to match), paper label on spine. Cambridge: J. Smith for J. & J.J. Deighton, 1831.

First edition. Miller (1801-80), professor of mineralogy at Cambridge from 1832 and a fellow of the Royal Society, is most famous for his system of crystallography. Before concentrating on mineralogy, he wrote the present "valuable" (ODNB) work on hydrostatics and hydrodynamics.

"As the title suggests, the introductory sections to this volume are devoted to the elements of hydrostatics and hydrodynamics. However, it is section VII (comprising roughly half of the volume) which is of interest to our subject. In it, Miller describes a variety of instruments and machines, including Bramah's press; the air pumps of Hawksbee and of Smeaton; the hydrometers of Sikes, of Nicholson, and of Meikle; Say's instrument for measuring the volumes of small solids; the piezometer; the hydraulic ram; the atmospheric steam engine; and Watts' double-acting steam engine."—Roberts & Trent, *Bibliotheca Mechanica*, p. 225.

Fine copy. Half-title lacking. Bookplates of the Franklin Institute. Ex Bibliotheca Mechanica.

137. MIZAULD, Antoine. De Hortensium Arborum Insitione Opusculum...eiusdem Dendranatome, hoc est partium corporis arborei

explicatio brevis: ubi de earundem nutritione. Woodcut printer's device on title. 28 leaves. 8vo, attractive modern marbled boards (minor browning towards end), red morocco lettering piece on spine. Paris: F. Morel, 1560. \$950.00

First edition. A very early work on plant grafting and with a section on plant nutrition.

The astrologer/physician Mizauld (d. 1578), is well-known for his association with Oronce Finé and for his works on medicine, astronomy, and astrology. Fine copy.

Plant Cytology

138. MOHL, Hugo von. *Vermischte Schriften botanischen Inhalts*. 13 lithographed plates (five partly hand colored). viii, 442 pp. Large 4to, cont. marbled boards (extremities a little worn), flat spine gilt. Tübingen: L.F. Fues, 1845. \$1750.00

First collected edition; this volume contains a collection of Mohl's papers published between 1830 and 1842, along with additional material. Mohl (1805-72), was the most important of the founders of plant cytology. "With the use of improved microscopes and techniques the broader became the understanding of the basic elements forming living tissue. Von Mohl, professor of botany at Tuebingen, gave the name *protoplasm* to the mucilaginous material within the plant cell adjacent to the membrane, a term that has grown to connote living substance."—Dibner, *Heralds of Science*, 32.

Very good copy.

Evans, Exhibition of First Editions of Epochal Achievements in the History of Science (1934), 87–"The collected earlier works of the most important of the founders of plant cytology." Pritzel 6349–(with a detailed list of the contents). Sachs, History of Botany, pp. 292-310.

"Important"

139. MONGE, Gaspard. *Description de l'Art de fabriquer les Canons*... 60 folding engraved plates & four folding printed tables. 2 p.l., viii, 231 pp. Large 4to, orig. blue paste-paper wrappers (extremities quite frayed), entirely uncut. Paris: de l'Imprimerie du Comité de Salut Public, An 2 [1794].

First edition. When the Revolution began in 1789, Monge (1746-1818), one of the most widely known of French scientists, was a director of a branch of France's military schools, enabling him to visit iron mines, foundries, and factories and thus becoming an expert on metallurgical and technological

questions. From September 1793 until October 1794, he took part in the work of the Committee on arms, writing the present "important" (*D.S.B.*) work on the making of cannons.

Good copy, handsomely illustrated. Preserved in a box. Ex Bibliotheca Mechanica.

№ D.S.B., IX, p. 472.

140. MOREAU, **César**. *Ueber Wollhandel und Wollmanufaktur in Grossbritannien von frühester bis auf gegenwärtige Zeit*. One folding printed table & numerous tables in the text. 59 pp. 4to, orig. blue wrappers. Berlin: A. Rücker, 1829. \$150.00

An offprint with new pagination from Vol. XXIV, Part One of the *Möglinschen Annalen*. The present work, which originally appeared in English in 1828, is a detailed history of the British wool trade, accompanied by much statistical information.

Moreau (1791-1860), French economist and statistician, specialized in the history of British trade.

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

№ N.B.G., 36, 509-10.

"The Leading Bridge Engineer in America"

- 141. MORISON, George Shattuck. A group of nine splendid bridge reports submitted by Morison, the chief engineer in each case, to the various railway companies upon completion of their bridge. Ranging in date from 1882 to 1894, they demonstrate the great advance in and widespread use of American steel-truss railway bridges. Each report describes the preliminary history of the project and its construction, including foundations, piers, approaches, etc. They are all magnificently illustrated with lithographic plates containing detail drawings, particularly of the metal structures, and, very often, photographic illustrations.

 Each report: \$1000.00
- 1. *The Plattsmouth Bridge. A Report.* Photographic lithographed frontis. & 26 lithographed plates. 1 p.l., 36 pp. Oblong folio, orig. printed wrappers, a.e.g. [New York: 1882].
- 2. *The Bismarck Bridge. A Report.* Photographic lithographed frontis. & 26 lithographed plates. 1 p.l., 44 pp. Oblong folio, orig. printed wrappers, a.e.g. [New York]: 1884.
 - 3. The Blair Crossing Bridge. Photographic lithographed frontis. & 19

lithographed plates. 1 p.l., 25 pp. Oblong folio, orig. printed wrappers, a.e.g. [New York]: 1886.

- 4. *The New Omaha Bridge. A Report*. 26 lithographed plates. 28 pp. Oblong folio, orig. printed wrappers. [New York]: 1889.
- 5. *The Rulo Bridge. A Report.* 23 lithographed plates. 30 pp. Oblong folio, orig. printed wrappers, a.e.g. [New York]: 1890.
- 6. *The Nebraska City Bridge. A Report*. Photographic lithographed frontis. & 20 lithographed plates. 25 pp. Oblong folio, orig. printed wrappers. [New York]: 1892.
- 7. The Cairo Bridge. Report. Photographic lithographed frontis. & 37 lithographed plates. 41, [12] pp. Oblong folio, orig. limp morocco, upper cover lettered in gilt. [New York]: 1892.
- 8. The Bellefontaine Bridge. A Report. Photographic lithographed frontis. & 18 lithographed plates. 40 pp. Oblong folio, orig. printed wrappers. [New York]: 1894.
- 9. *The Memphis Bridge. A Report.* Photographic lithographed frontis., 5 photographic lithographed plates, & 60 lithographed plates. 74 pp. Oblong folio, orig. limp morocco (foot of spine a little worn), upper cover lettered in gilt, a.e.g. New York: J. Wiley, 1894.

Morison (1842-1903), a graduate of Harvard, perfected his knowledge of engineering while serving as Chanute's principal assistant on the Erie Railroad. From 1880, Morison "devoted his attention for the next fourteen years to consulting practice. He built in rapid succession more than a score of great railroad bridges: over the Missouri (at Bismarck, Sioux City, Blair, Omaha, Rulo, Nebraska City, Atchison, Leavenworth, and Bellefontaine Bluffs), over the Mississippi (at Winona, Burlington, Alton, St. Louis, and Memphis), one over the Ohio at Cairo, two over the Snake River and one over the Columbia River in Washington, one over the Willamette at Portland, Ore., one over the St. John's at Jacksonville, Fla., and many smaller bridges in all parts of the United States. Considering the magnitude and difficulty of most of the projects, this record stands unrivaled in the history of bridge construction. The Missouri River was regarded as the most treacherous stream in the country to bridge, and little precedent existed for such work. The perfection of methods for handling the pneumatic foundation work involved in these projects was one of Morison's most notable achievements. This period also marked the transition from wrought iron to steel in bridge construction, and Morison was the great pioneer in the use of the latter metal. The Memphis bridge, the longest truss span in America when completed, practically set the standard for later steel bridge specifications...

"At the time of his death he stood at the very pinnacle of the engineering profession. He was regarded as the leading bridge engineer in America, perhaps in the world, and had an international reputation as an expert in railways and waterways."—D.A.B., VII, p. 191.

This is a remarkable collection of finely illustrated reports and all are in very

fine and fresh condition. Ex Bibliotheca Mechanica.

142. (NASMYTH, J.). *James Nasmyth, Engineer. An Autobiography.* Edited by Samuel Smiles. Frontis. port. (foxed), 10 plates, & numerous illus. in the text. xviii, 456 pp., 4 pp. of ads. 8vo, orig. green cloth (title with some foxing), sides & spine stamped in gilt. London: J. Murray, 1883.

\$150.00

First edition of the main biographical source on Nasmyth's life. "Although best known for his steam hammer, Nasmyth also did much to improve the design of machine tools in general. His mechanical skills were used to help William Lassell build a very fine Newtonian reflector, and he published astronomical observations of some interest."—D.S.B., IX, p. 615.

Fine copy.

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

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

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

Fine copy from the library of Graf von Seinsheim.

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

144. NAUMANN, Karl Friedrich. *Elemente der theoretischen Krystallographie*. 86 woodcut diagrams in the text. xvi, 383, [1] pp. 8vo, cont. marbled boards (corners a bit worn), printed paper label on spine. Leipzig: W. Engelmann, 1856. \$500.00

First edition of one of the author's principal works. Naumann (1797-1873), as professor of mineralogy and geology at Leipzig University, attracted a large number of mineralogy students to Leipzig. His most important books are concerned with crystallography and geology; he was the first to introduce the concept of a "crystal series."

Fine copy. From the library of His Serene Highness Prince Fürstenberg at

Donaueschingen.

№ D.S.B., IX, p. 620.

145. NAVIER, Claude Louis Marie Henri. On the Means of Comparing the Respective Advantages of Different Lines of Railway and on the Use of Locomotive Engines. Translated from the French... by John Macneill, Civil Engineer. xv, [2]-97 pp. 8vo, cont. green marbled boards (well-rebacked in calf). London: Roake & Varty, 1836.

First edition in English and the only work of the great French engineer to be translated into that language. "In his translation of this work by Navier, MacNeill provides a scientific basis and formulae for determining the most the most economical and efficient route for a railway line. In his introduction, MacNeill refers to Tredgold's Treatise on Railways and to Wood's Practical Treatise on Railways, but finds Tredgold's information antiquated and the tables presented by Wood inadequate. He praises Navier's formulae for allowing the user to 'approximate very nearly to a correct comparison between two lines of Rail-way,' attributing their superiority to Navier's skill as a mathematician . . . Following the July Revolution, Navier served as a consultant to the state on technical matters concerning transportation, including policy for 'laying out a national railway system.' In the text he discusses the principal elements involved in the comparison of different railway lines, the power required, the weight which can be drawn, the variations in the motion of the train on ascending and descending slopes, and provides a summary with a comparative estimate of the cost of transit on different railway lines."-Roberts & Trent, Bibliotheca Mechanica, p. 235.

Macneill (1793?-1880), was one of the principal assistants of Telford and was much involved with the improvement of turnpike roads and railways.

Fine copy. Ex Bibliotheca Mechanica.

146. NAVIER, Claude Louis Marie Henri. Résumé des Leçons d'Analyse données à l'École Polytechnique... suivi de Notes par M. J. Liouville... Deuxième Édition, revue par M. Ernest Liouville. Three folding lithographed plates (foxed). viii, 367 pp.; vi, 368 pp. Two vols. in one. 8vo, cont. red half-morocco & marbled boards (extremities a little rubbed, some foxing), spine gilt. Paris: V. Dalmont, 1856. \$250.00

Second edition, revised and with notes by Joseph Liouville (1809-82), professor of mathematics at the Collège de France. This was a standard textbook of the day.

Apart from the considerable foxing, a very good copy. Ex Bibliotheca Mechanica.

147. NERET, Charles Severin. *Essai sur le Typhus contagieux*. 39 pp. Large 4to, attractive modern marbled wrappers. Paris: Didot jeune, 1814. \$200.00

First edition of this rare thesis on typhus; there is no copy in OCLC. Neret, a native of Nancy, suggests how the disease is spread and provides a very detailed account of the course of the disease including incubation, invasion of the body, eruptions of the skin, and the final crisis. He provides six interesting case histories.

Fine copy.

A Pretty Copy

148. PASTEUR, Louis. Études sur la Maladie des Vers a Soie, Moyen Pratique assuré de la combattre et d'en prévenir le retour. Frontis., 37 plates (several of which are beautifully colored), and illus. & tables in the text. xii, 322 pp.; 3 p.l., 327 pp. Two vols. in one. Thick 8vo, orig. printed wrappers bound in cont. red sheep-backed marbled boards (minor foxing), spine gilt. Paris: Gauthier-Villars, 1870. \$1650.00

First edition and a very pretty copy of this important book. "This work saved the French silk industry, which had been crippled by the disease *pébrine*. After five years of research on the problem, Pasteur found the germs of this disease not only in the silkworms but also in the moths and ova. He demonstrated a successful method of overcoming the plague by a systematic microscopic examination of ova with elimination of all those found to be diseased."—Garrison-Morton 2481.

Fine copy.

149. PERRONET, Jean-Rodolphe. Mémoire lû à la Rentrée publique de l'Académie Royale des Sciences, le 15 Novembre 1775. Sur les Moyens de conduire à Paris, une partie de l'Eau des rivières de l'Yvette & de la Bièvre. One folding engraved plate (a little foxed). 24 pp. 4to, orig. marbled wrappers (a little frayed, some foxing & spotting). Paris: de l'Imprimerie Royale, 1776.

First edition of a very scarce report by Perronet regarding the feasibility of bringing drinking water from the Yvette and Bièvre Rivers northeast to Paris. The project had been initially proposed by an engineer named Parcieux, who had died before the work could begin. In this pamphlet, Perronet favorably reviews the specifications and costs for building the aqueduct. The plate depicts a map of the proposed route of the aqueduct.

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.

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

№ D.S.B., X, pp. 527-28.

150. PICHATTY DE CROISSANTE, —, **Monsieur**. A Brief Journal of what passed in the City of Marseilles, While it was Afflicted with the Plague, in the year 1720. Extracted from the Register of the Council-Chamber of the Town-House, kept by Monsieur Pichatty de Croissainte, Counsellor and Orator of that City, and the King's Attorney in Affairs relating to the good Government of it. Translated from the Original, published at Paris, with the King's Privilege. 2 p.l., 68 [i.e. 76] pp. 8vo, attractive antique calf-backed marbled boards, spine gilt, red morocco lettering piece on spine. London: J. Roberts, 1721. \$750.00

First edition in English, originally published in French earlier in the same year. The authorship of this work is also attributed to Daniel Defoe. Fine copy.

151. POINTE, Jacques Pierre. *Des Fistules en général*. 23 pp. Large 4to, attractive modern marbled wrappers (light browning). Paris: Didot jeune, 1812. \$250.00

First edition. Pointe (1791-1860), after taking his medical degree at Paris, returned to his native city of Lyon where he became professor of medicine. He wrote a number of medical books and contributed many articles to the leading French medical journals.

In this work, Pointe describes the kinds of fistula, including those leading either from the surface of the body to a normal cavity or canal, or from one normal cavity or canal to another.

Fine copy.

₩ Hirsch, IV, pp. 641-42.

The First American Treatise on Bridge Building

152. POPE, Thomas. A Treatise on Bridge Architecture in which the Superior Advantages of the Flying Pendent Lever Bridge are fully proved. With an Historical Account and Description of Different Bridges erected in Various Parts of the World, from an early Period, down to the Present Time. 17 engraved plates (frontis. partly detached). 9 p.l., [ix]-xxxii, 33-288 pp. (final plate &

last four leaves in facsimile). 8vo, attractive modern paper-backed blue boards (minor browning & foxing), uncut. New York, A. Niven, 1811.

First edition of the first American treatise on bridge building. It "was written by Thomas Pope, self-styled architect and landscape gardener. He seems also to have been a ship-builder and was thus interested in the construction of timber bridges. Much of the book is devoted to a world history of bridges citing an astonishingly wide range of sources from Martinelli (on the great Roman bridge at Narni) to Couplet, Hutton and Perronet and describing such famous $structures\,as\,Westminster, Wettingen, Sunderland, London, Coalbrook dale\,and$ Rialto bridges as well as bridges in Africa, China, Asia and of course, America. However, the volume serves primarily as a vehicle for Pope's own remarkable, if somewhat visionary, bridge design ('a more remarkable invention for bridges than has ever before been recorded in history'). He took out a patent in 1807 for a 'flying pendent lever bridge' made up of interlocking timber voussoirs (reminiscent of an earlier design by Montucla which Pope illustrates) to form a cantilevered arch curved on plan. Pope had built a scale model of the structure and intended to build the actual bridge with an 1800 foot span across the East River. However, he was not taken seriously and in 1811 submitted an 432 foot span version for crossing the Schuylkill at Philadelphia. Although Lewis Wernwag got the job, building his famous 'Colossus' bridge, he nevertheless had to modify his design so as not to infringe Pope's patent."-Elton, Cat. 9, 104.

Very good copy. The final plate and last four leaves are in quite good facsimile. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 264-65.

Ship-Wreck Rescues & Resuscitation

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

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

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

subjects which greatly contributed to the popularization of mechanics, mathematics, physics, and technological methods in Germany.

Fothergill's Essay on the Preservation of Shipwrecked Mariners, which was previously published by the Humane Society of London in 1800, has been translated with the following title "Versuch Schiffbruchleidende Seefahrer zu erhalten als Beantwortung folgender, von der k. Humanitätsgesellschaft in London aufgeworfenen Preisfragen: "1. Welche sind die besten Mittel Seefahrer vor dem Schiffbruche zu bewahren. 2. das Schiff flott zu erhalten? 3. der Schiffsmannschaft Hülfe zu leisten, zur Zeit eines heftigen Sturmes wenn Boote es nicht wagen können derselben beyzustehen?"

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

The plates depict life boats and other rescue devices.

Fine copy, printed on thick paper.

The Great Quebec Cantilever Bridge

154. (QUEBEC BRIDGE). The Quebec Bridge over the St. Lawrence River near the City of Quebec on the Line of the Canadian National Railways. Report of the Government Board of Engineers. **Text vol.**: Photographic frontis. & numerous photographic illus., diagrams, & tables in the text. 259 pp. **Plate vol.**: 3 p.l. of text & 111 folding lithographed plates. Two vols. Large oblong 4to, orig. cloth (a little spotted). N.p.: 1918. \$1250.00

The Quebec Bridge, spanning the St. Lawrence about nine miles above Quebec, replaced an earlier structure designed by Thomas Cooper in 1900 to carry the railway over the river. On 29 August 1907 it collapsed without warning in a matter of only fifteen seconds, killing several men and making bridge history as the most spectacular structural failure to that time. A photograph of the ruins shows the entire bridge virtually unrecognizable as such, the structure compressed into a compact mass of steel spaghetti.

As a result of the investigation, the detailing of compression members in particular and bridge engineering in general were raised to a much higher level of scientific analysis and design.

The second bridge, designed by Ralph Modjeski and completed in 1917, was its successor. A cantilever structure, it was based on the Forth Bridge, and it too had its problems. The 5000 ton center span collapsed into the river on 11 September 1916 as it was being hoisted vertically into position. One of the photographs in the book shows it at the precise moment when it struck the water. A new span was successfully lifted almost exactly a year later, the final pins being driven in on 20 September 1917. On 17 October the first train crossed the bridge; a regular freight service began on 3 December; and on 22 August

1919 the bridge was formally opened by the Prince of Wales. With a span of 1800 feet between the two main piers it was the largest of its kind in the world. This is the final report of the Board of Engineers, headed by Ralph Modjeski, and it forms the definitive account of the bridge, with a survey of the historical background and the story of the earlier structure, followed by all the technical information of the new one. The text is amply supported by the working drawings and many excellent photographs of the earlier bridge, the two disasters, progress of construction, first train crossing, the official opening etc.

Fine set. Ex Bibliotheca Mechanica.

155. RANBY, John. *A Narrative of the Last Illness of the Right Honourable the Earl of Orford: from May 1744, to the Day of his Decease, March the Eighteenth following.* One folding engraved plate. 4 p.l., 47, [1] pp. 8vo, attractive modern marbled boards, red morocco lettering piece on spine. London: J. & P. Knapton, 1745.

[bound with]:

—. An Appendix...Occasioned by the Letter from a Physician in Town to Another at Bath. 43, [1] pp. 8vo. London: J. & P. Knapton, 1745. \$950.00

First edition. Ranby (1703-73), sergeant-surgeon to King George II and a fellow of the Royal Society, was one of the leading English surgeons of his time. This is an uncommon and very interesting tract on the last illness and death of the British statesman Robert Walpole (1676-1745), who died from a kidney disease. Ranby was one of the physicians who treated Walpole and performed the autopsy. The plate shows 35 stones discharged or extracted from Walpole's body.

The first work gave great offense to many physicians, since Ranby utterly condemned the use of lithontrypic lixivium by James Jurin in the treatment of Walpole. In the appendix Ranby defends himself at length against his opponents.

Fine copies.

156. RAY, John. *Philosophical Letters between the late Learned Mr. Ray and several of his Ingenious Correspondents, Natives and Foreigners. To which are added those of Francis Willughby Esq; the Whole consisting of many curious Discoveries and Improvements in the History of Quadrupeds, Birds, Fishes, Insects, Plants, Fossiles, Fountains &c.* Published by W. Derham. Illus. & diagrams in the text. 4 p.l., 376, [10] pp., one leaf of ads. 8vo, cont. panelled calf, spine nicely gilt, red morocco lettering piece on spine.

London: W. & J. Innys, 1718.

\$1950.00

First edition of this valuable collection. Some of the correspondents include Martin Lister, Hans Sloane, Henry Oldenburg, and Edward Lhwyd and the topics discussed reflect Ray's wide range of interests.

Fine and handsome copy. This book is somewhat scarce.

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

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

Fine set.

≈ D.S.B., XI, pp. 327-35.

Widely Used

158. REGI, Francesco Maria de. Uso della Tavola Parabolica nella Misura delle Acque Correnti destinate all' Innaffiamento delle Terre... per Regolamento dell' Acque nel Ducato di Mantova... One folding engraved plate. 4 p.l., 77 pp., 18 leaves. Large 4to, cont. half-sheep & speckled boards, spine gilt, contrasting leather lettering piece on spine. Milan: G.R. Malatesta, 1764. \$1350.00

First edition. Regi (1720-94), a Barnabite, was royal mathematician and hydraulic engineer at Milan. This uncommon book, an elaboration of the earlier

researches of Guido Grandi, provides methods of determining the speed and volume of water flow through an orifice. There are frequent references to Poleni, Guglielmini, Mariotte, and Torricelli. According to Montucla (Vol. III, p. 706), the parabolic table invented by Grandi and developed by Regi was widely used throughout Italy.

A very fine copy printed on large paper.

№ Poggendorff, II, 587. Riccardi, II, 345.

The Geology of Moravia

159. REICHENBACH, Karl, Freiherr von. Geologische Mittheilungen aus Mähren. Geognostische Darstellung der Umgegenden von Blansko. Three folding engraved plates (two are finely hand-colored). x, 218 pp. 8vo, cont. cloth, black leather lettering piece on spine. Vienna: J.G. Heubner, 1834.

First edition of one of the earliest geological surveys of Moravia. In 1821, Reichenbach (1788-1869), "in partnership with Count Hugo zu Salm of Vienna, set up a group of metallurgical factories at Blansko in Moravia. They prospered and enabled him to purchase several estates, as well as interests in steelworks and blast furnaces at Terniz, Lower Austria, and Gaya, Moravia."—D.S.B., XI, p. 359–(& see the rest of the article about this fascinating and difficult man).

Of the three plates, the first is a finely hand-colored geological map of the area and the second, also hand-colored, depicts geological cross-sections.

Fine copy and rare.

"The Founder of Modern Psychiatry"-Garrison-Morton

160. [REIL, Johann Christian]. *Rhapsodieen über die Anwendung der psychischen Curmethode auf Geisteszerrüttungen.* 500 pp. 8vo, attractive modern paste-paper boards (title rather foxed, some foxing throughout), uncut, red morocco lettering piece on spine. Halle: Curt, 1818.

\$1250.00

Second edition (1st ed.: 1803). In Germany, perhaps the most conspicuous early work in linking physiology with psychiatry is associated with the name of Reil (1759-1813), whose anatomical studies of the brain are remembered eponymously in the "island of Reil."

With the present book, one of the most famous texts in the history of the treatment of mental diseases, Reil radically reformed psychiatry. The methods he advocated (psychotherapy, psychodrama, occupational therapy, shock treatment) were only taken up again in our own time. He effected improvements in the appalling conditions prevailing in the lunatic asylums and insisted upon the elevation of psychiatry to the position of an independent

branch of study at the universities. Garrison-Morton calls Reil "the founder of modern psychiatry," and in the words of Zilboorg and Henry "there is no doubt that we should consider Reil as one of the founders of psychiatry as a specialty."

Both editions of the *Rhapsodieen* are extremely rare books and this is a very good copy of the work.

№ *D.S.B.*, XI, pp. 363-65. Garrison-Morton 4923–(1st ed. of 1803). Zilboorg & Henry, *A History of Medical Psychology*, pp. 287-89.

161. RIBBE, Johann Christian. *Das Schaf und die Wolle, deren Geschichte, Erzeugung, Wartung, Veredlung und Beurtheilung*... One folding printed table. 1 p.l., [I]-v, [2], 265 pp., one leaf of errata. 8vo, orig. blue wrappers (a little worn). Prague: J.S. Calve, 1825. \$750.00

First edition of this history of the wool trade along with a detailed account of the methods of transforming fleeces into high quality textiles. Ribbe was professor of veterinary medicine at the University of Leipzig and a member of many scientific and economic societies.

Very good copy and rare with no copy in *N.U.C.* Old library stamp on title of the Standeherrschaft, Königsbrück, with release stamp.

162. RICCI, François Dominique. Mémoire sur les Dents raciformes ou racisubériques; Nouvelle Méthode d'implanter les Dents a Pivot, de les faire tenir solidement dans les plus mauvaises racines, et de faire cesser la carie du canal dentaire. 16 pp. 8vo, orig. blue wrappers (first two leaves with an unimportant marginal stain), stitched as issued, uncut. Paris: L.G. Michaud & l'Auteur, 1816.

First edition and quite scarce. Ricci, son of the prominent Italian dentist Giovanni Battista, established himself in Paris and maintained a very successful practice, specializing in the making and securing of artificial teeth. He developed a device — a "tenon des antennes" made of swelling cork — to fasten the post of the prostheses to the enlarged root canal. It is described in the present work. Fine copy.

№ Crowley, Dental Bibliography, 889. Hoffmann-Axthelm, History of Dentistry, pp. 256 & 271-72. Poletti, De Re Dentaria apud Veteres, p. 164.

Alabaster

163. RITTER, Albrecht. *Lucubratiuncula II. De Alabastris Schwartzburgicis cui subnexa est rerum quarumdam Naturalium ejusdem Terrae brevis delineatio.* One folding engraved plate. 31 pp. Small 4to, modern marbled

wrappers. [Helmstädt]: 1732.

\$500.00

First edition of this rare work on alabaster. Ritter (1684-1755), prorector at the Royal College at Ilefeld and a member of the Academia Caesarea Naturae Curiosorum, wrote numerous monographs on mineralogical and geological subjects.

Fine copy. A Lucubratiuncula I was published a year earlier.

- № Poggendorff, II, 651.
- **164. RITTER, Albrecht**. *Epistolica Oryctographia Goslariensis*. One folding engraved plate. 15 pp. Small 4to, modern marbled wrappers. Helmstädt: 1733. \$500.00

First edition of this rare work on the geology of the area surrounding Goslar, a town at the north foot of the Harz Mountains. There was much mining of sulphur, copper, silver and other metals.

Fine copy.

- Poggendorff, II, 651.
- **165. RITTER, Albrecht.** *Commentatio II. De Zoolitho-dendroidis in Genere et in Specie de Schwartzburgico-Sondershusianis curiosissimis ac formosissimis una cum Supplemento rerum naturalium et curiosarum huius regionis in Lucubratiuncula II. De Alabastris Schwartzburgicis.* Two folding engraved plates. 4 p.l., 34 pp. Small 4to, modern marbled wrappers (a little foxing). Sonderhausen: 1736.

First edition and very rare; OCLC locates no copy of this paleontological work in the U.S.

Fine copy.

№ Poggendorff, II, 651.

The Brooklyn Bridge

of the East River Suspension Bridge. Folding lithographed frontis. & four folding lithographed plates (several with careful repairs to folds with slight loss of image). 92 pp. 8vo, modern boards. New York: G.W. Averell, 1872. \$750.00

First edition. "The foundations of the Brooklyn bridge, no less than its famous superstructure, made a significant advance in the development of construction techniques. The towers were founded upon huge timber caissons from within

which the ground was excavated, using compressed air to withstand the external pressures as they sank to nearly 100ft below the river bed under the weight of the masonry above. Although the use of compressed air for excavating at depth was not new, the Brooklyn bridge foundations, with those of the slightly earlier St. Louis bridge, were on a new scale. Roebling's clear account is extracted from his annual reports and presented as a connected narrative; it appeared when the towers had reached more than half their intended height."–Elton, *Cat. 4*, 61–(this copy).

Very good copy. Ex Bibliotheca Mechanica. The printed upper wrapper is bound-in (carefully backed with rice paper). The number of plates seem to vary with each copy with a maximum of twelve, including the frontispiece.

Pomology

167. ROESSLER, Mathias. Sistematisches Verzeichniss aller in den Baumschulen der podiebrader Dechantey kultivirten Obstsorten, nebst Beisetzung aller der Sinonimen und Provinzialbenennungen, unter welchen sie in den meisten pomologischen Schriften vorkommen; wie auch einer kurzen Anzeige der Güte, Zeit der Reife, Dauer der Früchte, und andern nützlichen Anmerkungen. xxviii, 212 pp. 8vo, cont. orange boards. Prague: K. Barth, 1798.

First edition on fruit trees, their varieties, and the characteristics of each fruit. "Nursery catalogue with cultivar descriptions of apples, pears, peaches, apricots, plums, medlars, gooseberries."—Janson, *Pomona's Harvest. An Illustrated Chronicle of Antiquarian Fruit Literature*, p. 406 (& see pp. 180 & 262).

Fine copy. Old stamp of the "Bibliothek Liebenberg" on title.

168. ROUSSILLE DE CHAMSERU, Jean François Jacques, respondent. [Drop-title]: *An Retina primarium visionis instrumentum?* 7 pp. Large 4to, disbound. [Paris: Quillau, 1770]. \$300.00

First edition of Roussille's thesis on the role and importance of the retina in vision. There are references to Newton, Mariotte, and Saint-Yves. Roussille (1750-?), was a physician in Napoleon's army and later had a practice in Paris. He wrote a number of articles in the *Mémoires* of the Paris Royal Society of Medicine.

Fine.

№ Hirsch, IV, p. 899.

"Famous Thesis"-Hirsch

169. ROUX, Philibert Joseph. *De la Résection ou du Retranchement de Portions d'Os malades, soit dans les Articulations, soit hors des Articulations. Dissertation.* 1 p.l., 55 pp. 4to, modern marbled wrappers (light browning). Paris: Migneret, 1812. \$500.00

First edition. Among the French surgeons of the 19th century, Roux (1780-1854), was second in importance only to Dupuytren. He is particularly remembered for his work in plastic surgery and osteoplasty. In 1812 he competed with Dupuytren for the chair of operative medicine with the present thesis. In it he reviews the different methods of resection of bone and for the first time gives detailed descriptions of his own method for which he became famous. Garrison Morton 4456 lists only a later article by Roux on the subject.

Fine copy.

Hirsch, IV, p. 900-"famous thesis."

170. SAUSSURE, Horace Bénédict de. Essais sur l'Hygrométrie. Ier. Essai. Description d'un nouvel Hygrometre comparable. II. Essai. Théorie de l'hygrométrie. III. Essai. Théorie de l'évaporation. IV. Essai. Application des théories précédentes à quelques phénomenes de la météorologie. Two engraved plates (one folding) of apparatus. xxiv, 367 pp. Large 4to, cont. half-calf & marbled boards (joints a little rubbed, short split at head of each joint, corners a little worn), spine gilt. Neuchatel: S. Fauche, 1783.

[bound with]:

— . Défense de l'Hygrometre a Cheveu, pour servir de Suite aux Essais sur l'Hygrométrie. One engraved plate. 2 p.l., 60, [2] pp. Large 4to (some foxing). Geneva: Barde, Manget, 1788. \$1750.00

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

II. First separate edition, originally appearing in the *Observations sur la Physique* (1788), Vol. 32. Saussure's invention of the hair hygrometer was attacked by several persons including Deluc, Chiminello, and G.B. da San Martino. In this very rare work, Saussure further describes and defends his instrument.

Very good copies. Old library stamp and ownership inscription of the Royal Society of Edinburgh on first title.

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

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

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

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

Not in Mantel.

"In Good Repute"

172. SCHEFFER, Johannes. *De Militia Navali Veterum Libri Quatuor. Ad Historiam Graecam Latinamque utiles*. Added engraved title, four engraved plates (two folding), & numerous woodcut illus. in the text. 4 p.l. (incl. the added engr. title), 348 pp. 4to, cont. fine vellum over boards. Uppsala: J. Jansson, 1654. \$1950.00

First edition of this interesting book on the boats and ships, designed for warfare, of ancient Greece and Rome. The author describes navigation techniques, methods of construction, armaments, decorative elements, crew requirements, etc.

Scheffer (1621-79), was professor of eloquence and political philosophy at Uppsala and is considered by Sandys to be the true founder of classical philology in Sweden. "His illustrated treatises on the ships, the carriages, and even necklaces of the ancients, are in good repute."—Sandys, II, p. 368.

The handsome plates and woodcuts depict many kinds of ships.

A very fine copy with the ownership inscription of Joseph von Lassberg, the German scholar and bibliophile on the free front endpaper. From the library of His Serene Highness the Prince Fürstenberg at Donaueschingen with the usual stamp on verso of title.

173. SCHNEE, Gotthilf Heinrich. Allgemeines Handbuch für Land- und Hauswirthschaft in alphabetischer Ordnung, oder Naturhistorisch-Oekonomisch- Technologisches Handwörterbuch für Land- und Hauswirthe. One engraved plate & numerous woodcut illus. in the text. vi, [v]- vi, 330, [1], [331]-715, [1], 723-724 pp. Large 4to, cont. turquoise boards

(extremities a bit worn), contrasting leather lettering piece on spine. Halle: Hemmerde & Schwetschke, 1819. \$1350.00

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

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

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

* A.D.B., Vol. 32, pp. 89-90.

Mining in Eisenerz

174. SCHREBER, Daniel Gottfried. *Beschreibung der Eisen, Berg, und Hüttenwerke zu Eisenärz in Steyermark*. One folding engraved plate & one folding printed table. 3 p.l., [3]-138 pp. Large 4to, cont. half-sheep & paste-paper boards (a little worn), spine gilt, contrasting leather lettering piece on spine. Leipzig & Königsberg: J.J. Kanter, 1772. \$1750.00

First edition of this rare account of the mining and iron and steel making activities of Eisenerz, an old mining town in Styria, Austria. The iron ore quarried there is particularly rich and the town owes its prosperity to this fact.

Pages 25-138 contain "Mineralogischer Versuch über die Eisensteine des Arzberges in Obersteyermark, nebst beygefügter Beschreibung der Eisenerzstufen des Gräzischen Naturalien-Kabinets" by Nicolaus Poda von Neuhaus (1723-98), a Jesuit, professor of mathematics and physics at Graz, and also professor of mining technology and subterranean surveying at the famous mining academy at Chemnitz.

Fine copy. The plate depicts several views of a furnace.

№ Poggendorff, II, 478-79–(Poda). *Encyc. Brit.*, Vol. 8, p. 114 for Eisenerz. Not (yet) in Schuh, *Mineralogy: A Bio-Bibliography* (in preparation).

175. SCHWERZ, Johann Nepomuk Hubert von. *Anleitung zur Kenntniss der Belgischen Landwirthschaft*. Twelve folding engraved plates & 2 folding printed tables. Three vols. 8vo, orig. cream boards. Halle: Hemmerde & Schwetschke, 1807-08-11.

First edition of this uncommon and massive survey of farming, forestry, and agriculture in Belgium; I believe this is the earliest systematic and scientific investigation of the country regarding these subjects. Schwerz (1759-1844), director of the farming academy at Hohenheim, was the most important

representative of the empirical school of farming in Germany of his time and the author of numerous works on country life.

In the present work, the author describes the main crops cultivated, farming practices, and provides much statistical information. The plates depict farming apparatus, barns, methods of laying out fields, etc.

Fine set in original condition.

≈ A.D.B., Vol. 33, pp. 438-40. Güntz, Handbuch der landwirtschaftlichen Literatur, II, 245.

"Eine Treffliche Beschreibung"

176. SCHWERZ, Johann Nepomuk Hubert von. *Beschreibung der Landwirthschaft im Nieder-Elsass*. xii, 450 pp. 8vo, orig. blue boards (foot of spine a bit defective). Berlin: G. Reimer, 1816. \$1000.00

First edition of this rare survey of farming and agriculture in Alsace. Schwerz describes in great details the crops grown, production levels, farming practices, etc.

Fine copy. Duplicate from the Sächsische Landesbibliothek, Dresden with their release stamp.

▶ A.D.B., Vol. 33, pp. 438-40–"Eine treffliche Beschreibung." Güntz, *Handbuch der landwirtschaftlichen Literatur*, II, 245.

A Major Advance in Shipbuilding

177. SEPPINGS, Sir Robert. *On a New Principle of Constructing His Majesty's Ships of War...from the Philosophical Transactions*. Double-page folding engraved plate (some foxing). 1 p.l., 18, xvii pp. Large 4to, cont. diced russia (a little rubbed, upper joint just cracking but strong), triple gilt fillet round sides, four of five spine compartments with ship motif in gilt. London: W. Bulmer, 1814.

First separate edition, an offprint with new pagination; this is a fine presentation copy, inscribed on the title: "Wm Nicholson Esq from the Author." Nicholson (1753-1815), was the translator of Fourcroy and Chaptal, the editor of the first general scientific periodical in England published independently of the academics, and one of the important British figures in the new chemical movement.

Seppings (1767-1840), naval architect, solved the structural problems of the wooden warship which had impeded its development both in terms of size and of strength and durability. In this work, he describes "his invention of the system of diagonally bracing and trussing the frame-timbers, an invention of the first importance in shipbuilding. Hitherto, ships of the first class had suffered from the arching of their keels, technically called 'hogging.' This arose from the

irregularity of the weight occasioned by greater upward pressure in the centre than in the extremities...To prevent this result Seppings suggested that the frame-timbers should not, as had previously been done, be merely placed square and rectangular to each other, but that they should be braced together by trusses laid diagonally, and forming a series of triangles...

"Seppings fully and clearly explained the new system in a paper read before the Royal Society on 10 March 1814 [the present work], and supplied a print of a section indicating the arrangements in detail...By his innovations Seppings rendered ships in every way more seaworthy and better adapted for defence."—D.N.B., XVII, pp. 1187-88.

Fine copy with the armorial bookplate of Nicholson and the bookplate of the Scott Library.

Singer et al., A History of Technology, IV, pp. 583-84.

178. SEUBERT, Moritz. Lehrbuch der gesammten Pflanzenkunde zum Unterricht an höheren Lehranstalten, sowie zum Selbststudium. Numerous woodcut illus. in the text. vi, 410 pp. 8vo, orig. green marbled boards (somewhat worn), printed paper label on upper cover. Stuttgart: J.B. Müller, 1853.

First edition. Seubert (1818-78), was professor of botany and director of the natural history museum at Karlsruhe. This work was very popular and reached a fifth edition in 1870.

Good copy. From the Fürstenberg library at Donaueschingen.

Pritzel 8636.

179. SEUTTER VON LOETZEN, Johann Georg von. Versuch einer Darstellung der allgemeinen Grundsätze der Forstwirthschaft nach ihren Verhältnissen zu der Staats- Cameral- und Landwirthschaft nebst einigen Bemerkungen über die Folgen der Veräusserung der Staats- und Vertheilung der Gemeindswaldungen. One folding printed table. xxiv, 570 pp. 8vo, cont. mottled half-sheep & paste-paper boards, contrasting vellum lettering piece on spine. Ulm: Becker, 1804.

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

Fine copy from the library of the Graf von Seinsheim.

Mantel, I, 22.

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

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

Fine and handsome set. Bookplate of Graf von Seinsheim.

№ A.D.B., Vol. 34, pp. 68-70. Mantel, I, 25.

181. SGANZIN, **Joseph Mathieu**. *An Elementary Course of Civil Engineering*. Translated from the French...from the Third French Edition, with Notes and Applications adapted to the United States. Six folding engraved plates. viii, 220 pp. 8vo, orig. cloth-backed boards (minor rubbing), printed paper label on spine (label flaked), uncut. Boston: Hilliard, Gray, Little, & Wilkins, 1827. \$950.00

First American edition of this classic textbook; it was a very popular and successful book in the U.S. with several later editions. It was first published in Paris in 1807 as the *Programme*; it was to form the basic text for several generations of engineers, not only in France but also in North America, where it was used at the West Point Military Academy until 1837.

Sganzin (1750-1837), was one of the leading civil engineers in France for nearly fifty years; he worked on a series of great projects including the port of Havre, the re-establishment of the great lock near Ostende, and the enlargement of the great lock at Flessingue. He was also professor of civil engineering at the Polytechnique.

Fine copy. Ex Bibliotheca Mechanica.

Rink, Technical America, 2358.

182. SILBERSCHLAG, Johann Esaias. *Abhandlung vom Wasserbau an Strömen. Preisschrift*... 13 folding engraved plates. 4 p.l., 246 pp. 8vo,

antique vellum (some foxing). Leipzig: J. Wendler, 1756. \$1750.00

First edition. "Silberschlag's prize-winning treatise on water-works and streams. The treatise is divided into two parts, the first devoted to theory and comprising four chapters which discuss the inner conditions of streams, their rise and fall, velocity, and the stream-bed. The sixteen chapters comprising the practical part discuss the instrumentation and materials employed in water-works, water rights, strengthening the banks of rivers, deepening waterways, controlling an excessive volume of water, and the construction of scaffolding, bridges, ice-breakers, and placement of mills. This part also includes chapters on river transport, the construction of dikes and dams, canals, sluices, ditches, and drainage, as well as an appendix on the estimation of costs.

Silberschlag (1721-91), a priest at Magdeburg and a member of the Royal Academy of Sciences at Berlin, wrote many books and articles on hydraulics, river improvement, technology, and related scientific subjects.

Fine copy. Rare. Ex Bibliotheca Mechanica.

A.D.B., Vol. 34, pp. 314-16. Poggendorff, II, 929-30.

A Scientist's Autobiography

183. SILBERSCHLAG, Johann Esaias. *Leben, von ihm selbst beschrieben*. Fine folding engraved frontis. port. of the author. 1 p.l., 62 pp. 8vo, orig. wrappers bound in later boards (some foxing). Berlin: im Verlage der Königlichen Realschul Buchhandlung, 1792. \$1350.00

First edition of this very rare posthumously published autobiography by Silberschlag (1721-91). On pages 58-62 we find an excellent bibliography of 54 of his publications.

Good copy. Royal stamp on title and another of Prof. Dr. Martin Philippson. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, p. 295-97.

184. SMEATON, John. *The Report of John Smeaton, Engineer, concerning the Drainage of the North Level of the Fens, and the Outfall of the Wisbeach River*. One large folding engraved chart. 24 pp. 4to, orig. blue wrappers. N.p. n.d. [but probably London: 1768]. \$1350.00

First edition and rare. The first systematic attempt to drain the Fens, a silted-up bay of the North Sea, north of Cambridge, was made by the Romans. During the next 1500 years there were numerous other attempts at drainage and all were largely unsuccessful. One of Smeaton's major civil engineering activities was to prepare schemes to drain the Fens. The present work describes his plan to drain the North Level by means of embankments and sluices. A detailed estimate of

the costs is provided.

Fine copy. Ex Bibliotheca Mechanica.

Skempton 1318.

185. SMILES, Samuel. *Lives of the Engineers*. Illus. 5 vols. 8vo, cont. blue half-calf & marbled boards, spines richly gilt, red morocco lettering pieces on spines. London: J. Murray, 1874-91-97-78-99. \$500.00

A very pretty mixed set of this classic, a collection of biographies of the great men of the Industrial Revolution, including Brindley, Smeaton, Rennie, Metcalfe, Telford, Boulton, Watt, and the Stephensons.

Fine and handsome set. Ex Bibliotheca Mechanica.

A Royal Copy

186. SPALLANZANI, Lazzaro. Expériences pour servir a l'Histoire de la Génération des Animaux et des Plantes . . . avec une Ébauche de l'Histoire des Etres organisés avant leur fécondation; par Jean Senebier. Three folding engraved plates. 2 p.l., xcvi, 413 pp. early 19th-cent. marbled boards, flat spine gilt, orange leather lettering piece on spine. Geneva: B. Chirol, 1785.

First edition of Senebier's translation of Spallanzani's writings on the generation of animals and plants from Vol. II of his *Dissertazioni di Fisica animale e vegetabili* (Modena: 1780). Spallanzani was one of the first to dispute the doctrine of spontaneous generation. He was a believer in the "preformation" theory. Senebier's translation contains several observations which are not in the Italian edition.

This is preceded by Senebier's Ébauche de l'Histoire des êtres organisés avant leur fécondation (88 pages) and his refutation of Ingen-Housz's attacks on his publications on photosynthesis.

Fine copy. Stamp on verso of half-title and title of Prince Ernest Augustus, Duke of Cumberland, and the subsequent Kings of Hanover.

№ D.S.B., XII, pp. 553-67. Prandi, p. 82. Needham, A History of Embryology, p. 212.

British Science & Society Defended

187. SPRAT, Thomas. Observations on Monsieur de Sorbier's Voyage into England. Written to Dr. Wren, Professor of Astronomy in Oxford. 1 p.l., 298 pp. 8vo, cont. calf (some wear & rubbing). London: J. Martyn & J.

Allestry, 1665. \$1500.00

First edition of Sprat's defense of English science and society against the supposed attacks of Sorbière. "An interesting commentary on the *Relation d'un Voyage en Angleterre, où sont touchées plusieurs choses, qui regardent l'estat des Sciences, & de la Religion, et autres matieres curieuses* (Paris: T. Jolly, 1664), of Samuel de Sorbière (1615-1670). Sprat (1635-1713), bishop of Rochester and dean of Westminster, was one of the scientific circle from which sprang the Royal Society, of which he was a fellow (1663). He published the earliest *History of the Royal Society* (London, 1667). His *Observations on . . . Sorbiere's Voyage into England* is, according to the D.N.B., 'a stinging reply to Sorbiere.' On page 2 Sprat states that Sorbiere's book is 'an insolent Libel on our Nation . . . [containing] . . . many errors, and falshoods.' Sorbiere's book contains an account of scientific events in England during the early days of the Royal Society, and Sprat comments on it. Sorbiere had known Hobbes in Paris and was taken about and introduced to famous scientists by the French traveler-scientist Monconys."—Neville, II, p. 505.

In fact, Sprat chose to focus only on Sorbière's relatively few unfavorable comments. On the whole, his *Relation* gave a very favorable picture of England and especially of the Royal Society (see *D.S.B.*, XII, pp. 584-85 for a full and interesting account).

Good copy. Armorial bookplate of John Pinney.

188. STEINBECK, Christoph Gottlieb. Feuersnoth- und Hülfsbuch fürs teutsche Volk und seine Freunde. Nach dem Krügelsteinschen System bearbeitet. Woodcut vignette on title. xx, 299 pp. 8vo, cont. wrappers. Munich: J.B. Strobel, 1802. \$500.00

First edition, Munich issue (there is also a Leipzig issue) of this notable book on fire prevention. It is based on the important three-volume work of Krügelstein which appeared in 1798-1800 (see our Cat. 76, item 45). In the present work, Steinbeck (1766-ca.1826), a resident of Langenberg, describes fire-proof materials for use in construction, the necessity of lightning rods, the need for implementing rules for fire prevention in towns and cities, etc.

Fine copy from the Fugger family library in Augsburg. Very rare with no copy in N.U.C.

189. TARTRA, A.E. De l'Opération de la Cataracte; Thése soutenue publiquement, dans l'Amphithèâtre de la Faculté de Médecine de Paris…le vendredi 24 Janvier 1812. 1 p.l., 86 pp. Large 4to, attractive modern marbled wrappers. Paris: L.P. Dubray, 1812. \$250.00

First edition. An elaborate monograph on the operation of cataracts by Tartra (ca. 1775-ca. 1840), Paris surgeon, written as a thesis in the competition for the

chair of operative medicine in the Medical Faculty of Paris.

Fine copy.

➢ Albert, Norton, & Hurtes, Source Book of Ophthalmology, 2252. Hirsch, V, p.
520.

Tetanus

190. TEILLARD, M.J.B. *Quelques Considérations sur le Tétanos traumatique chronique; Thèse.* 16 pp. 4to, modern marbled wrappers. Paris: Didot jeune, 1815. \$275.00

First edition of this very rare work (no copy in OCLC) on tetanus. The author, a surgeon at the Hôtel Dieu at Lyon, describes the symptoms of tetanus, its causes, and treatment.

Fine copy.

191. TIEMANN, Wilhelm Albrecht. *Abhandlung über die Förmerei und Giesserei auf Eisenhütten*. Attractive engraved vignette on title & three folding engraved plates. 112 pp. 8vo, cont. marbled boards (head of spine a little chipped). Nuremberg: Raspe, 1803. \$1350.00

First edition of a rare book on the casting of iron into desired shapes. The author describes the moulds, the various tools used, and the techniques of casting cannons, statues, and bells. Pages 101-08 contain information on methods of casting medallions, coins, and medals. There is also a four-page glossary of terms.

The attractive plates depict the casts and tools. Fine copy.

192. TORELLI, Giuseppe. *De Rota sub Aquis Circumacta Epistola*. One folding engraved plate & one diagram in the text. 10 pp. 8vo, modern marbled wrappers. Verona: Typis Seminarii, 1747. \$950.00

First edition of this rare work on water wheels. Torelli (1721-81), a native of Verona, "published a number of works on geometric subjects. In this tract he proposes a more efficient paddle wheel for raising water for the irrigation of farmlands."–Roberts & Trent, *Bibliotheca Mechanica*, p. 321.

Fine copy, preserved in a cloth box. Dedicated to Giovanni Poleni. Ex Bibliotheca Mechanica.

Riccardi, II, 538–(and see his interesting note).

193. [TREBRA, Friedrich Wilhelm Heinrich von]. *Merkwürdigkeiten der tiefen Hauptstölln des Bergamtsreviers Freyberg. Zur Begleitung der Charte von diesen Stölln angefügt von dem Verfasser der Erfahrungen vom Innern der Gebirge.* One folding printed table. 96 pp. 8vo, cont. paste-paper boards. Dresden: gedruckt in der Churfürstlichen Hofbuchdruckerey, 1804.

\$1500.00

First edition. Trebra (1740-1819), became inspector of mines for the government of Hannover in 1779 and spent more than a decade at Zellerfeld, in the Harz Mountains, where he greatly developed the metal-mining industry of the Upper Harz. During an earlier assignment at Ilmenau, Trebra met Goethe, who had charge of the Ilmenau mines. Trebra accompanied Goethe in his geological wanderings through the Harz as a friend and collaborator. They remained close friends for nearly forty years.

The present work is concerned with tunneling techniques developed at the famous mining academy at Freiberg.

Lacks the errata leaf at end. Several stamps and bookplates including that of Richard von Hardt.

№ D.S.B., XIII, pp. 455-56. Poggendorff, II, 1127.

194. TREDGOLD, Thomas. *Remarks on Steam Navigation and its Protection, Regulation, and Encouragement in a Letter to the Right Honourable William Huskisson, Treasurer of the Navy, and President of the Board of Trade.* 31 pp. 8vo, modern wrappers. London: Longman et al., 1825. \$1250.00

First edition and very scarce. In the present work, Tredgold (1788-1829), makes a series of recommendations for the prevention of accidents in steam ships. He suggests improving the strength of the materials used in constructing ships. Tredgold also recommends hiring trained inspectors who would examine each ship and its engines for safety on a regular basis.

Fine copy, preserved in a slipcase. Ex Bibliotheca Mechanica.

▶ D.N.B., XIX, pp. 1094-95.

195. TRNKA VON KRZOWITZ, Wenzel. *Commentarius de Tetano plus quam ducentis clarissimorum Medicorum Observationbius, nec non omnibus hactenus cognitis adversus Tetanum Remediis instructus*. 4 p.l., 465, [3] pp. 8vo, cont. half-vellum & speckled boards (some foxing), uncut. Vienna: A. Bernard, 1777. \$950.00

First edition of this thorough work on tetanus, which provides a comprehensive history of this disease, its symptoms, diagnoses, and treatments

(including many of a pharmacological nature).

Trnka (1739-91), a Bohemian physician of great learning, was professor of anatomy at the University of Tyrnau. He wrote on a number of diseases and was highly regarded for his observations, erudition, and industry. Hirsch considered Trnka to be an authority of the first rank during his time. His historico-pathological writings are conclusive summaries of the knowledge of his century.

Nice copy. Scarce.

№ Hirsch, V, p. 640.

Pioneer Work in Bone Generation

196. TROJA, Michele. *De Novorum Ossium, in Integris aut Maximis, ob Morbos, Deperditionibus, Regeneratione Experimenta...* Three folding engraved plates & one folding printed table. x, [11]-240 pp. 8vo, cont. vellum over boards (binding a little soiled & stained). Paris: F.A. Didot, 1775. \$1500.00

First edition. Troja (1747-1827), studied medicine at Naples and in 1774 he went to Paris where he began the research on the formation of bone tissue and bone generation which made him famous. Although Réaumur and Trembley had earlier demonstrated the regrowth of limbs in crustacea and polyps, no one before had considered the possibility of regrowth of bones.

"Troja demonstrated that if a foreign body is introduced into the marrow cavity of a long bone, the bony cylinder dies and a new bone is formed all around the necrotic one, the latter being eventually eliminated. Accordingly, Troja suggested that in treating extensive caries of the bone, marrow should be destroyed, so that new bone formation would result."—Leonardo, *Lives of Master Surgeons*, p. 428.

Troja later took up again his work on bone surgery and regeneration. In 1814 he first described the perforating connective-tissue fibers, usually known as "Sharpey's fibers."

Fine crisp copy. Ex Bibliotheca Mechanica.

№ D.S.B., XIII, pp. 464-65. Hirsch, V, p. 642–"a very important work" (in trans.).

197. TUERK, Wilhelm von. Vollständige Anleitung zur zweckmässigen Behandlung des Seidenbaues und des Haspelns der Seide, sowie zur Erziehung und Behandlung der Maulbeerbäume, nach den neuesten Erfahrungen und Beobachtungen. Four folding engraved plates & three folding printed tables. vii, 131 pp.; xii, 140 pp.; xii, 100, [2] pp. Three parts in one vol. 8vo, cont. green morocco-backed green boards, flat spine nicely decorated in

blind & gilt. Potsdam: Riegel, 1829.

\$1750.00

First edition of this rare work on sericulture and a lovely copy from the library of the Kings of Hannover. Türk (1774-1846), was a high government official in the education department.

The present work is one of the most complete of the time in Germany on the rearing of silkworms under artificial or domesticated conditions, their feeding, the formation of cocoons, etc. and the manufacture of silk and textiles made from silk. The author has provided an interesting history of sericulture and a survey of the silk-manufacturing activities throughout Europe, Turkey, Russia, and Asia.

Fine copy.

• A.D.B., Vol. 39, pp. 17-20.

198. U.S. NAVY DEPARTMENT, Bureau of Navigation. *Navy Scientific Papers. No.* 10. *Papers and Discussions on Iron Ships. Reprinted from Transactions of the Institution of Naval Architects.* 13 folding lithographed plates. 176 pp. 8vo, orig. blue cloth, stamped in gilt on upper cover. Washington: G.P.O., 1883. \$250.00

First edition. The articles include: "On causes of Unseaworthiness in Merchant Steamers," "Twenty Minutes with Passenger Steamers 'On the Long Ferry'," "On Cellular Construction of Merchant Ships," "On the Leading Phenomena of the Wave-making Resistance of Ships," "On the Russian Imperial yacht 'Livadia'," and "On the Injuries sustained by the 'Livadia' in the Bay of Biscay."

Fine copy. With the bookplate and stamps of the Franklin Institute Library. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 331-32.

199. U.S. NAVY DEPARTMENT, Bureau of Navigation. *Navy Scientific Papers. No. 11. Papers and Discussions on Steel for Ship-Building. Reprinted from Transactions of the Institution of Naval Architects.* 5 folding lithographed plates & one lithographed table. 208 pp. 8vo, orig. blue cloth, stamped in gilt on upper cover. Washington, G.P.O., 1883.

\$250.00

First edition. The articles include: "On Steel for Ship-building," "On Steel in the Ship-building Yard," "On the increased use of Steel in Ship-building," "On the use of Mild Steel for Ship-building in the Dockyards of the French Navy," "The Almirante Brown, Argentine Cased Corvette," and "The Structural Arrangements and Proportions of H.M.S. Iris."

Fine copy. With the bookplate and stamps of the Franklin Institute Library. Ex

Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 331-32.

200. U.S. NAVY DEPARTMENT, Bureau of Navigation. *Navy Scientific Papers*. *No.* 12. *Papers and Discussions on Screw Propulsion. Reprinted from Transactions of the Institution of Naval Architects*. 12 folding lithographed plates & two lithographed tables. 222 pp. 8vo, orig. blue cloth, stamped in gilt on upper cover. Washington: G.P.O., 1883. \$250.00

First edition. Some of the articles include: "On the comparative efficiency of Single and Twin-Screw Propellers in Deep-draught Ships," "On the use of Steel for Marine Boilers," "On the Steam Trials of H.M.S. *Iris,*" "On Twin-Ship Propulsion," "On peculiarities of behavior of Steel used in boilers, for the Russian Yacht *Livadia,*" and "On the influence of the Cut-off and Length of Stroke on the working of Steam Engines."

Fine copy. With the bookplate and stamps of the Franklin Institute Library. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 331-32.

201. U.S. NAVY DEPARTMENT, Bureau of Navigation. Navy Scientific Papers. No. 14. Papers and Discussions on Experiments with Steel. Reprinted from Transactions of the Institution of Naval Architects. 82 pp. 8vo, orig. blue cloth, stamped in gilt on upper cover. Washington: G.P.O., 1883.

\$200.00

First edition. The articles include: "Experiments on steel," "On the corrosive effects of steel on iron in salt water," "On the relative corrosion of iron and steel," "On the economical advantages of steel shipbuilding," "On cracks and annealing of steel," and "On the quality of material used in shipbuilding."

Fine copy. With the bookplate and stamps of the Franklin Institute Library. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 331-32.

202. U.S. NAVY DEPARTMENT, Bureau of Navigation. *Navy Scientific Papers. No. 16. Papers and Discussions on Engines, Boilers and Torpedo Boats. Reprinted from Transactions of the Institution of Naval Architects.* 18 folding lithographed plates. 219 pp. 8vo, orig. blue cloth, stamped in gilt on upper cover. Washington: G.P.O., 1884.

First edition. Some of the articles include: "On the Triple Expansive Engines of the Steamship Aberdeen" by A.C. Kirk, "On Corrosion in Steam Boilers" by

W.J. Norris, "On Certain Points of Importance in the Construction of Ships of War" by Capt. G.H. Noel, "On Sea-going Torpedo Boats" by J.A. Normand, "Some Experiments to test the Resistance of a first-class Torpedo Boat" by A.F. Yarrow, and "A self-propelling, self-careening Floating Dock" by G.R. Rennie.

Fine copy. With the bookplate and stamps of the Franklin Institute Library. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 331-32.

203. U.S. NAVY DEPARTMENT, Bureau of Navigation. *Navy Scientific Papers*. *No.* 21. *The Injurious Effect of a Blue Heat on Steel and Iron. Reprinted from the Proceedings of the Institution of Civil Engineers, London*. Tables in the text. 84 pp. 8vo, orig. blue cloth, stamped in gilt on upper cover. Washington: G.P.O., 1887.

First edition. Written by C.E. Stromeyer. Fine copy. With the bookplate and stamps of the Franklin Institute Library. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 331-32.

204. U.S. NAVY DEPARTMENT, Bureau of Navigation. *Navy Scientific Papers*. *No.* 23. *The Resistance of Ships*. Twenty folding lithographed plates. 107 pp. 8vo, orig. blue cloth, stamped in gilt on upper cover. Washington: G.P.O., 1888. \$275.00

First edition. This volume contains a collection of articles by William Froude (1810-79), one of the prominent names in hydraulic research. He established the methods for evaluating the results of towing tank tests on model ships that are still in use by naval establishments today.

Fine copy. With the bookplate and stamps of the Franklin Institute Library. Ex Bibliotheca Mechanica.

Roberts & Trent, Bibliotheca Mechanica, pp. 331-32.

The History & Theory of Optics

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

First edition. Venturi (1746-1822), professor of physics at the Universities of Modena and Pavia, is most famous for what is now termed the "Venturi Principle," namely that in passing through converging pipes fluids under

pressure gain speed and lose head, and vice versa for diverging pipes. The Venturi principle is now very widely adopted for metering flows in pipes, tunnels, and channels.

He also performed important work on optics and color theory and this is one of his chief contributions to these subjects in which he provides a history of optics and perspective from ancient times to Huygens. At the beginning is a memoir of Bonaventura Corti (1729–1813), professor of physics in the College of Reggio and Venturi's teacher, who discovered cyclosis in 1774. His observations were overlooked, however, and the phenomenon was rediscovered by Treviranus in 1811. Venturi here restates the original observations made by his master Corti.

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

Poggendorff, II, 1193.

206. VERGNIES, **François Alexis**. *Considérations sur l'Anthrax non contagieux*. vi, 22 pp. Large 4to, modern marbled wrappers. Paris: Didot jeune, 1815. \$375.00

First edition of this very rare thesis on non-contagious anthrax. Anthrax can enter the human body through the intestines, lungs (inhalation), or skin (cutaneous). Vergnies describes the symptoms and treatments and provides four fascinating case histories.

Fine copy.

An Important Work on the Hyacinth

207. VOORHELM, George. *Traité sur la Jacinte. Contenant la maniere de la cultiver suivant l'expérience qui en a été faite.* Three engraved plates (two folding, one with a short clean tear). [3]-13 pp., [3], 123 pp. 8vo, cont. vellum over boards. Haarlem: I. & J. Enschedé, 1752. \$1950.00

First edition. "George (or Joris) Voorhelm belonged to the firm of Voorhelm & Van Zompel (later Voorhelm & Schneevoogt), who maintained a famous nursery at Haarlem. His great-grandfather, Dirk Jansz Voorhelm, had come from Vorhelm in Westphalia in the time of the Tulipomania (1636-37) and become a bulb-grower. His grandfather, Pieter Voorhelm, is said to have developed the double hyacinth, of which the bulbs sometimes sold for tall prices. George Voorhelm published his *Traité sur la Jacinte* at a time when nurserymen were generally opposed to the dissemination of their secrets, but in this manner he considerably increased the business of his firm and gained a measure of fame for himself . . .

"Of particular significance for the study of hyacinths is the inclusion of a list of 246 named varieties having double flowers, a mutation then well known in

gardens for the previous two centuries. Currently, fewer than a half-dozen cultivars are grown in Holland by a few specialists. The Voorhelm list appears at pp. 51-59 of the 1752 edition. The frontispiece and the plate at p.120 show three double varieties, unidentified."–Hunt 545.

Lacking the half-title but a fine copy. There were two later edition published in Haarlem and German and English translations.

Pritzel 9852. Stafleu & Cowan 16,352.

208. WADDINGTON, Marianna Florenzi, Marchesa. *Facoltà di Sentire considerata* . . . 39 pp., 1 leaf of errata. 8vo, orig. printed self-wrappers. Montepulciano: A. Fami, 1858. \$1250.00

First edition. The Marchesa Marianna Florenzi Waddington (1802-70), studied science and philosophy as a young woman. She translated Leibniz into Italian and was instrumental is making the philosophers Kant, Spinoza, and Schelling known in Italy.

The present work — which is very rare with no copy in OCLC — is her medical/philosophical essay on the senses.

Fine copy.

The First Complete History of Astronomy

209. WEIDLER, Johann Friedrich. *Historia Astronomiae sive de Ortu et Progressu Astronomiae*. *Liber Singularis*. Title in red & black. 12 p.l., 624, [40] pp. 4to, cont. calf (some browning as usual), gilt fillet round sides, spine gilt, lettering piece gone. Wittenberg: G.H. Schwartz, 1741.

\$1950.00

First edition of the first complete history of astronomy and still of great value for its bibliographical information. Lalande greatly praised this work and wrote that, while Bailly's history is more extensive, Weidler's is precious for the large amount of factual information it contains.

Weidler (1691-1755), who succeeded Wolf in the chair of mathematics at Wittenberg, was a fellow of the Royal Society and wrote many books on mathematics, hydraulics, astronomy, and technology.

Nice copy.

Houzeau & Lancaster 11-"Première histoire complète de l'astronomie." Lalande, p. 414.

210. WEIS, Friedrich Wilhelm. *Plantae Cryptogamicae Florae Gottingensis*. Engraved vignette on title & one folding engraved handcolored plate. 3

p.l, xii, 333, [1] pp. 8vo, cont. half-calf & marbled boards, flat spine gilt, crest of Edward Rudge on spine in gilt, green leather lettering piece on spine. Göttingen: Widow of A. Vandenhoeck, 1770. \$1250.00

First edition. The author's dissertation of 1769 had the same title but comprised only 35 pages. This is a detailed catalogue of the cryptogams found in the area surrounding Göttingen. For each cryptogram Weis (1744-1826), has provided botanical references (including Linnaeus) and careful descriptions of each plant's botanical characteristics.

Fine copy. This copy belonged to Edward Rudge (1763-1846), botanist and antiquary, who was the author of several botanical works (see *D.N.B.*).

№ Pritzel 10146.

211. WELL, **Johann Jakob von**. *Methodische Eintheilung mineralischer Körper*. *Zum Gebrauche seiner Vorlesungen*. Four engraved plates depicting chemical symbols. 375, [1] pp. 8vo, cont. paper-backed blue boards (slight dampstaining, some foxing). Vienna: R. Gräffer, 1786. \$1350.00

First edition of this very uncommon book. Well (1725-87), a physician and apothecary, was the first professor of natural history at the University of Vienna. He wrote several interesting chemistry books in which he supported Black's theory of causticity and fixed air (see Cole). Well also formed a collection of natural history objects.

In the present work, Well presents his own mineralogical arrangement. Very good copy.

Poggendorff, II, 1292.

212. WERNECK, Ludwig Friedrich Franz, Freiherr von. Vollständiger Forstcalender, worinnen alle einem Förster obliegende Verrichtungen von Monat zu Monat angezeigt werden, nach der angenommenen Ordnung Hrn. Johann Gottlieb Beckmanns, Forstinspectors in Wolkenburg, mit gründlich unterrichtenden Anmerkungen und Belehrungen zu ausführlicher Beschreibung und Taxirung des Forstes, Schätzung des Nutzholzes, Abfuhre des Holzes und Anlegung der Holzwege, nebst genauen und deutlichen Tabellen und Rissen, auch ausführlichern Ausrechnungen, dann einer anatomischen Zergliederung des Baumes, und andern zur Forstwissenschaft unentbehrlichen Stücken vermehrt. Ten folding engraved plates & three folding printed tables. 6 p.l., 382 pp. 8vo, cont. half-sheep & paste-paper boards (first few leaves a little foxed), cont. vellum lettering piece on spine. Breslau: J.F. Korn the

Elder, 1777. \$1500.00

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

Fine copy from the library of Graf von Seinsheim.

Presentation Copy to Lady Herschel

213. (WHEWELL, William). William Whewell, D.D. Master of Trinity College, Cambridge. An Account of his Writings with Selections from his Literary and Scientific Correspondence. By Isaac Todhunter. xxxi, [1], 416 pp.; 2 p.l., 439, [1] pp. Two vols. 8vo, orig. brown cloth (slightly bubbled), covers decorated in black, spines gilt. London: Macmillan, 1876.

\$1650.00

First edition of the best bio-bibliographical source for Whewell. Todhunter covers Whewell's scientific and scholarly work and includes a large collection of his letters. The author finished his biography of Herschel's old friend five years after Herschel's own death and the book is presented to his widow.

Presentation copy, inscribed to "M.B. Herschel" "From the Author" at head of both half-titles, with Lady Herschel's book-label on front free end-paper of Vol. I and with the Collingwood stamp on both titles and head of the first page of text in each volume. With extensive notes in pencil on rectos of both rear free end-papers and briefer notes on verso of front free end-paper of Vol. I and on final advertisement in Vol. II.

Fine set.

Roberts & Trent, Bibliotheca Mechanica, p. 353.

214. WHITWORTH, Joseph. Miscellaneous Papers of Mechanical Subjects. One mounted photograph, two lithographed plates (one of which is a double-page hand-colored color scale). Illus. in the text. 4to, orig. morocco (extremities rubbed), sides panelled in blind & gilt, spine lettered in gilt, a.e.g. Manchester: [Privately] Printed by G. Falkner, 1870. \$1500.00

This appears to be a privately printed nonce collection of Whitworth's various scientific papers; there were other editions in 1858 and 1873, each with different contents.

The contents of this collection are:

1. "On Plane Metallic Surfaces, and the Proper Mode of Preparing them";

- 2. "On a Uniform System of Screw Threads";
- 3. "Excerpt Minutes of Proceeding of the Meeting of the Institution of Mechanical Engineers, at Glasgow, 17th September, 1856. Address of the President";
- 4. "On a Standard Decimal Measure of Length for Mechanical Engineering Work";
 - 5. "Letter to the Earl De Grey and Ripon";
 - 6. "On the Proper Form of Projectiles for Penetration through Water";
- 7. "Comparison between the Whitworth 'Polygonal' and the Woolwich 'Studded' Projectiles";
 - 8. "On the Proof of Guns";
 - 9. "On the Penetration of Armour Plates by Long Shells fired obliquely";
- 10. "Report of the Discussion on Mr. Whitworth's Paper, 'On the Penetration of Armour Plates with Long Shells of Large Capacity fired obliquely";
 - 11. "Sir Joseph Whitworth on Machinery";
 - 12. "Sir J. Whitworth's Guns";
 - 13. "The Whitworth Guns. Present State of the Question";
 - 14. "Comparative Tests by Gunpowder";
 - 15. "Whitworth Metal"

Sir Joseph Whitworth (1803-87), a fellow of the Royal Society and president of the Institution of Mechanical Engineers, was a mechanical genius who discovered the true plane and made important contributions to exact measurement, gunnery and artillery, and metallurgy (see the long account of this fascinating man in *D.N.B.*, XXI, pp. 166-70).

Very good copy and rare; no copy of this edition in OCLC. Bookplate of Delane. Ex Bibliotheca Mechanica.

Getting Goods to Market

215. WHITWORTH, Robert. A Report and Survey of the Canal, Proposed to be made on one Level, from Waltham-Abbey to Moorfields. Also a Report and Survey, of a Line, which may be continued from Marybone to the said proposed Canal, in case any future Design of Navigation to that Place or the North Side of London, from the Rivers Thames or Coln, should ever take Place... To which is subjoin'd, An Address... on the Importance and great Utility of Canals in General... by James Sharp. Two folding engraved maps (one quite long & large). 1 p.l., 8 pp.; 1 p.l., 16 pp. Two parts in one vol. Small folio, later red boards. [London: 1773].

First edition. "Towards the end of the 18th century, London's transport links with the burgeoning Midland industrial centres were increasingly inadequate involving heavily-locked and circuitous routes to the Thames near Oxford and thence downstream via several navigation weirs to London. The canal proposed

by Robert Whitworth at the instigation of the City authorities represents an early effort to remedy this. Encircling North London and so avoiding the Thames, it was intended to run from the Lee Navigation at Waltham Abbey to a basin at Moorfields. A further line would leave this basin for Marylebone to form a connection with another canal joining the Colne Navigation at Drayton. For much of its route Whitworth's canal followed the contour and thus avoided locks. Although it was not to be built it was prophetic of the Regent's Canal (built 1812-20) which in part followed a similar line and connected North London with the Grand Junction Canal to Birmingham . . .

"Whitworth's fine report gives a detailed account of the canal giving reasons for his choice of route and providing an estimate of construction costs. It is accompanied by a forceful letter by James Sharp, a member of the Common Council, pointing out the beneficial effects upon trade of canal transport and urging the construction of Whitworth's canal to maintain the Port of London's superiority over world trade. Whitworth himself was one of the most distinguished of the 18thcentury canal engineers. He was Brindley's chief assistant and after Brindley's death developed a substantial practice of his own building many major projects including the Thames & Severn Canal and a substantial part of the Leeds & Liverpool Canal."—Elton, Cat. 11, 109.

Very good copy. Ex Bibliotheca Mechanica.

Skempton 1798.

216. WIEBEKING, Carl Friedrich. *Beiträge zum praktischen Wasserbau und zur Maschienenlehre*. Five folding engraved plates. xi, [3], 223, [1] pp. 4to, cont. half-sheep & paste-paper boards, spine gilt, red morocco lettering piece on spine. Düsseldorf: J.C. Dänzer, 1792. \$1500.00

First edition and very rare with no copy in *N.U.C.*, OCLC, or RLIN; this is the author's first book. Wiebeking (1762-1842), hydraulic engineer and architect, was a high government official charged with overseeing waterway, bridge and road construction in several states of Germany. He worked in Düsseldorf, Darmstadt, Vienna, and Munich and was the author of a number of books on bridge and road building and other aspects of civil engineering.

This work is, in large part, concerned with the problem of improving the navigability of the Rhine and Sieg rivers in order to allow larger ships access to the rivers. There is a great deal of theoretical discussion with frequent references to Bernoulli, Guglielmini, Euler, Vauban, Silberschlag, and others. Pages 156-200 are devoted to the merits of overshot versus undershot watermills for milling corn.

The attractive plates depict specific plans for taming the Rhine between Bonn and Cologne and other river taming projects along the Rhine and Sieg.

Fine and handsome copy.

• A.D.B., Vol. 55, pp. 659-661.

217. [WILLIG, M.L.]. *Anleitung zum Wasser-Bau oder kurzer Unterricht für Landleute, So an Wasser-Flüssen wohnen, und keine Anweisung von Wasserbau-Verständigen haben, wie sie ihre vom Wasser eingerissene Ufer selbst mit geringen Kosten, auch mehrentheils selbst habenden Materialien ausbessern, und für fernern Abbruch bewahren mögen,* aufgesetzet von einem Haushalter ohnweit Göttingen. Four folding engraved plates. 3 p.l., 42 pp. 8vo, cont. half-vellum & speckled boards. Göttingen: Widow of Bandenhoeck, 1757.

First edition of this extremely rare work on river management. The author describes techniques of channeling and diverting water, enabling land to be reclaimed and used for agriculture and housing.

The attractive plates depict dikes, dams, embankments, etc. Fine copy and not in OCLC.

218. [WILSON, Thomas]. Distilled Spirituous Liquors the Bane of the Nation: being some Considerations humbly offer'd to the Hon. the House of Commons. By which it will appear, I. That the Landed Interest suffers greatly by the Distilling of Spirituous Liquors. II. From a Physical Account of the Nature of all Spirituous Distilled Liquors, and the malignant Effects they have upon Human Bodies. III. From the several Disorders and Immoralities occasioned by This Sort of Excess, —That all Ranks and Orders of Men are concerned in using their utmost Endeavours to put an immediate Stop to it. 1 p.l., viii, 61, [1], 24 pp. 8vo, modern green morocco, uncut. London: J. Roberts, 1736.

\$1500.00

First edition. "In the following Paper I have endeavoured to demonstrate the Great Injury that accrues to the Publick, by making and vending such Quantities of Distilled Spirituous Liquors."—from the Preface.

Wilson (1703-84), divine and a considerable book collector, took his degree at Christ Church, Oxford, and was prebendary of Westminster (see *D.N.B.*, XXI, p. 613).

Fine copy.

219. WOODWARD, John. *Geographie Physique, ou Essay sur l'Histoire* Naturelle de la Terre, traduit de l'Anglois, ... par M. Noguez ... avec la Réponse aux Observations de M. le Docteur Camerarius; plusieurs Lettres écrites sur la même matiere; & la Distribution méthodique des Fossiles, traduits de l'Anglois, du même M. Woodward, par le R.P. Niceron ... Folding engraved plate. xiv, 389, [2] pp. Large 4to, cont. mottled sheep (rubbed, occasional light foxing), spine gilt, red morocco lettering piece on spine. Paris: Briasson,

1735. \$1000.00

First edition in French of Woodward's *An Essay toward a Natural History of the Earth* (1695), a celebrated and influential contribution to the advancement of geological knowledge. Woodward (1665-1728), believed that "the earth formerly had been submerged beneath a universal deluge . . . These waters had dissolved, or disintegrated and held in suspension, all the stony and mineral matter forming the outer crust of the earth . . . From the confused mass that had formed, the matter in suspension, both organic and inorganic, subsided in an order determined, so far as was possible, by the specific gravity of the individual components. Thus a stratigraphic succession was formed."—*D.S.B.*, XIV, p. 501. His *Essay* also contributed toward establishing that strata throughout the world are, generally speaking, similar in character, a conclusion necessary before an acceptable theory of the origin of the rocks of the crust of the earth could be formulated.

Appended are Woodward's responses to one of his most violent geological opponents, Elias Camerarius, professor at Tübingen. These responses, in a series of letters and essays, were translated by Benjamin Holloway. Some appear to be hitherto unpublished.

At the end is the first translation into French of Woodward's Fossils of all Kinds digested into a Method (1728). Woodward divided all minerals into six classes with many subdivisions. Here he described some 200 minerals, together with their modes of occurrence in some cases. Some specimens were examined under the microscope. "Woodward was the first British author to publish a systematic classification and description of minerals based on his own observations."—D.S.B., XIV, p. 502.

Very good copy. 18th century signature of F. Allamand on free front-endpaper.

Draining the Fens

220. YEOMAN, Thomas. *The Report of Thomas Yeoman, Engineer, concerning the Drainage of the North Level of the Fens, and the Outfal of the Wisbeach River.* One large folding engraved plate. 12 pp. 4to, cont. blue wrappers (two small wormholes). N.p. [London?]: [Report dated 15 November 1769]. \$1250.00

First edition and very scarce. The first systematic attempt to drain the Fens, a silted-up bay of the North Sea north of Cambridge, was made by the Romans. During the next 1500 years there were numerous other attempts at drainage and all were largely unsuccessful. In the 1760s there was a renewed interest and Yeoman was engaged to make a report. He has provided here a very detailed proposal and an estimate of its cost (7280 pounds). John Golborne (ca. 1724-83), engineer to the River Dee Company, also prepared a report which appeared

later in the year.

The large attractive folding plate is a most informative graph and map entitled "A Chain and Scale of Levels along Wisbeach River and Channel from Peterborough Bridge down to the Eye at Sea."

Fine copy, preserved in a box. Upper cover inscribed by a contemporary hand "Mr. Yeoman." Ex Bibliotheca Mechanica. Rare, with no copy in *N.U.C.*

221. YOUNG, Thomas. *Hydraulic Investigations, subservient to an intended Croonian Lecture on the Motion of the Blood.* **25** pp. Large 4to, attractive antique half-calf & marbled boards (many edges uncut). London: W. Bulmer, 1808. \$750.00

First separate edition of this offprint with a title-page and new pagination from the *Philosophical Transactions*. In the present work, Young clarifies the physical laws governing the circulation of the blood.

"The versatile Young is regarded as one of the greatest of all scientists."—Garrison-Morton 1486.

Fine copy. Rare; OCLC records no copy of this offprint. Ex Bibliotheca Mechanica.

▶ D.S.B., XIV, pp. 562-72.

222. ZACH, Franz Xaver, Freiherr von. *Tabulae Motuum Solis Novae et Correctae ex Theoria Gravitatis et Observationibus recentissimis erutae*. *Quibus accedit Fixarum praecipuarum Catalogus Novus ex Observationibus Astronomicuis Annis 1787, 1788, 1789, 1790 in Specula Astronomica Gothana habitis*. Engraved frontis. giving two views & the floor plan of the observatory at Gotha. 4 p.l., 195, ccl pp. Large 4to, orig. boards (spine perished), entirely uncut. Gotha: C.G. Ettinger, 1792. \$1250.00

First edition. Zach (1754-1832), came from a noble and distinguished family in Hungary and Czechoslovakia. In 1786 he was appointed head of the observatory which Duke Ernst II of Gotha-Altenburg erected near Gotha. This work, considered to be one of the author's most important works, contains Zach's notable observations and tables made at the observatory.

Fine copy preserved in a drop-back cloth box with a blue morocco lettering piece on spine.

№ *D.S.B.*, XIV, pp. 582-83. Lalande, pp. 622-23–"Ces tables et ce catalogue sont un travail précieux d'un de nos plus grand astronomes."

223. ZACH, Franz Xaver von. Tables abrégées et portatives du Soleil. Calculées pour le Meridien de Paris sur les Observations les plus recentes

d'après la Theorie de M. La Place. vii, 67, [1] pp. 8vo, cont. decorated wrappers. Florence: Molini, 1809. \$800.00

First edition. Zach (1754-1832), came from a noble and distinguished family in Hungary and Czechoslovakia. In 1786 he was appointed head of the observatory which Duke Ernst II of Gotha-Altenburg erected near Gotha and in his following years he wrote a number of books containing his observations as well as solar tables and star catalogues.

Very good copy. Lacking a leaf of ads at end.

№ D.S.B., XIV, pp. 582-83.

224. ZIPPE, **Franz Xavier Maximillian**. *Die Krystallgestalten der Kupferlasur*. Five folding engraved plates. 1 p.l., 3-53 pp. 8vo, modern boards (several library stamps & ownership inscriptions on title). Prague: G. Haase Sons, 1830. \$950.00

First separate edition and rare; originally published in the *Königliche-Böhmischen Gesellschaft der Wissenschaften*. Zippe (1791-1863), was professor of chemistry at the Technical Institute of Prague and director of the newly established mineralogical cabinet of that city. In 1850 he was appointed professor of mineralogy at the University of Vienna.

The fine plates depict crystal structures.

Very good copy with the bookplate of Franz, Count of Thun-Hohenstein Tetschen

Poggendorff, II, 1416-17. Schuh, Mineralogy: A Bio-Bibliography (in preparation), 5123.

Important Description of the Upper Harz Mountains

225. ZUECKERT, Johann Friedrich. *Die Naturgeschichte und Bergwercksverfassung des Ober-Harzes*. 8 p.l., 300 pp. 8vo, orig. blue wrappers, uncut. Berlin: F. Nicolai, 1762. \$1500.00

First editions. Zückert (1737-78), was a physician at Berlin and the author of many books on medicine, balneology, and geology. This work comprehensively describes the natural history — with special emphasis on the geology and mineral riches — of the upper region of the Harz mountains. The book has considerable interest for the descriptions of the iron- and copper-mines, the marble quarries, and the mineralogy of the region.

Fine copy in original state. Scarce.

№ Hirsch, V, pp. 1051-52. Hoover 912.