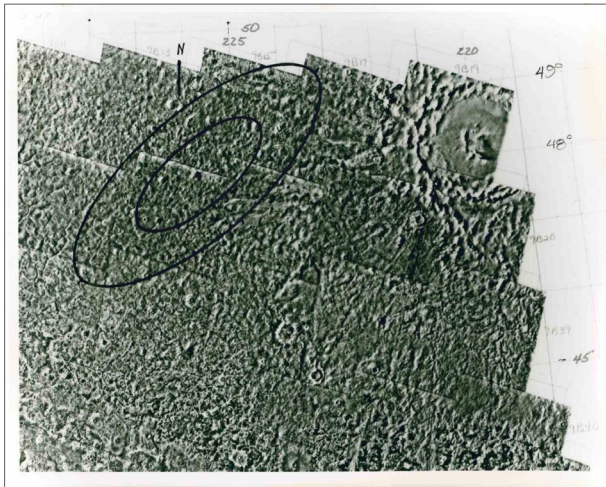
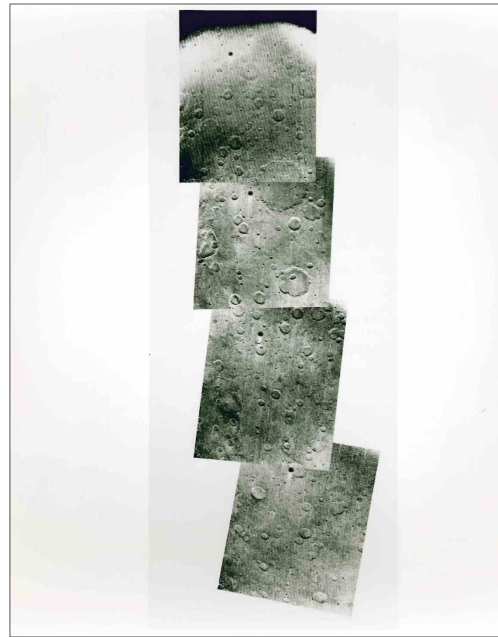
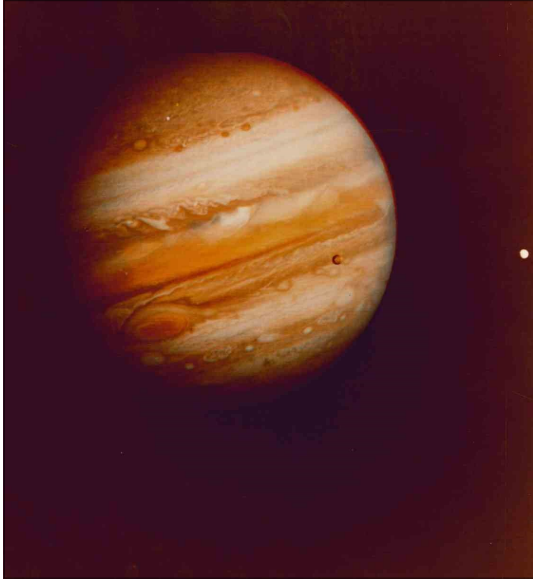
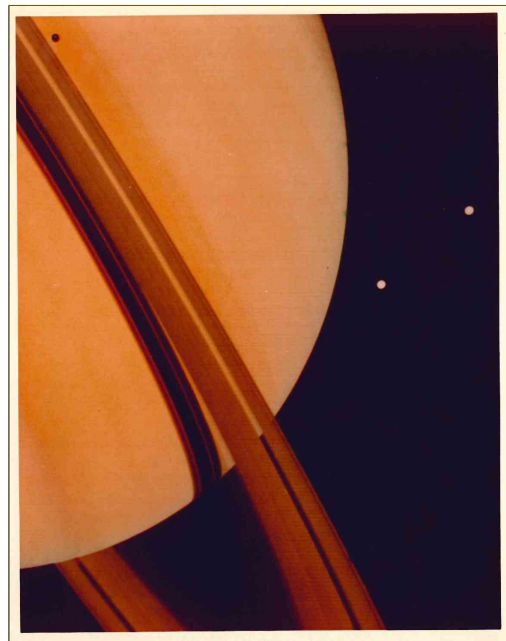
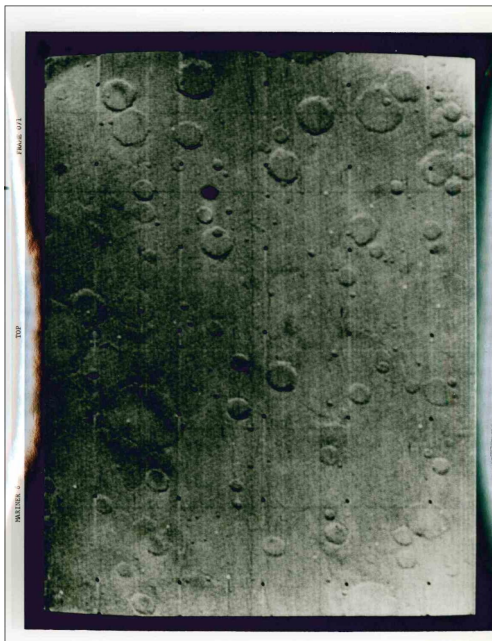
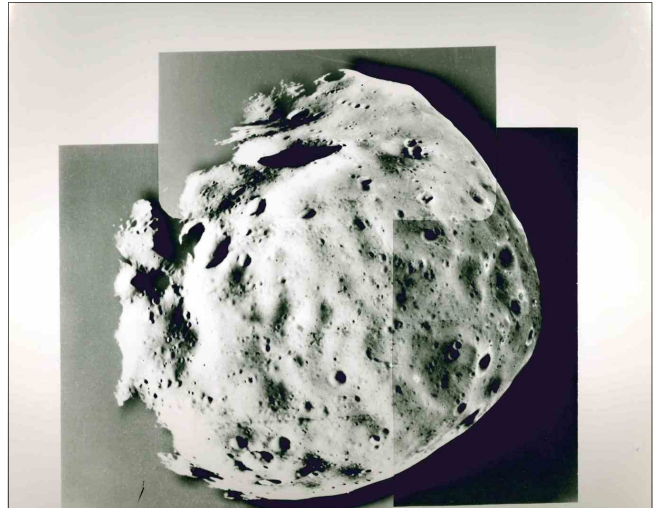
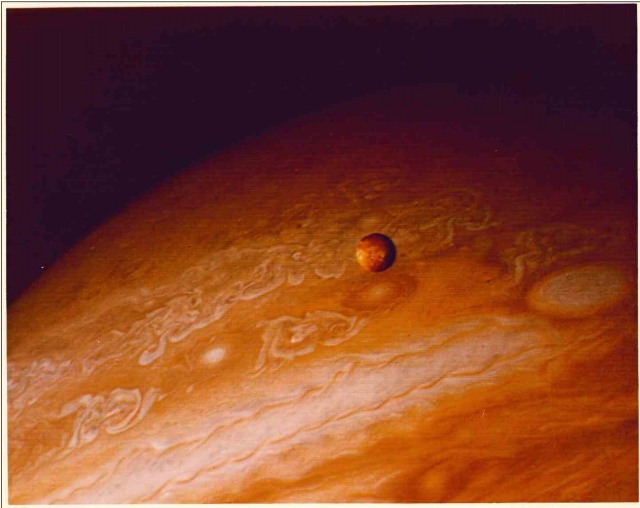
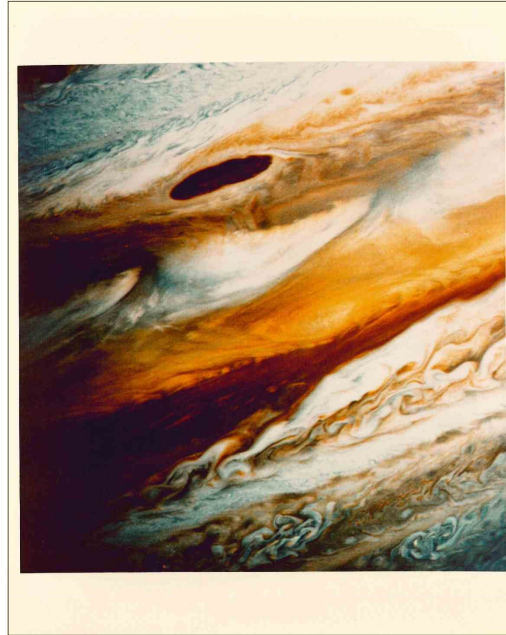
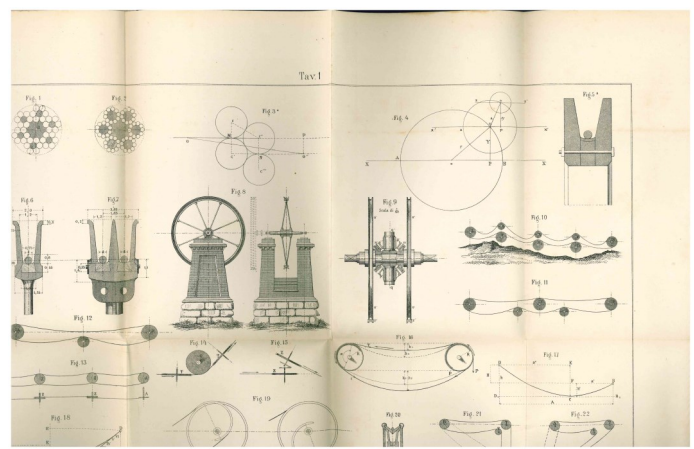
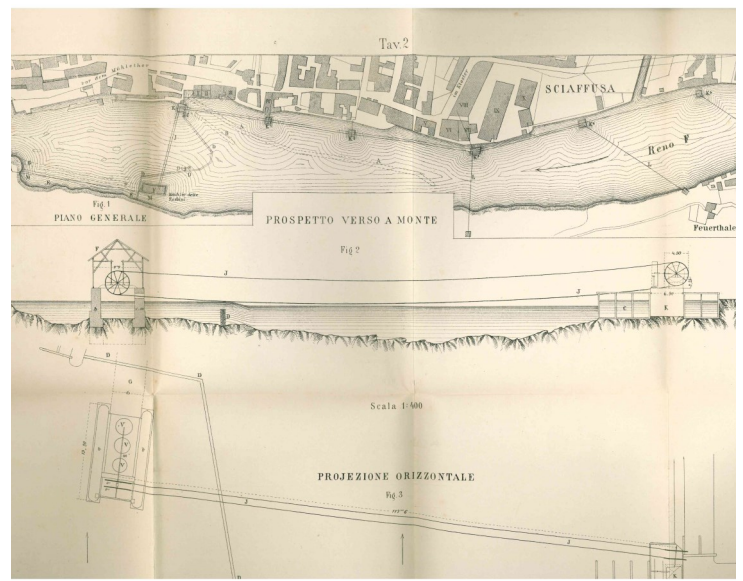
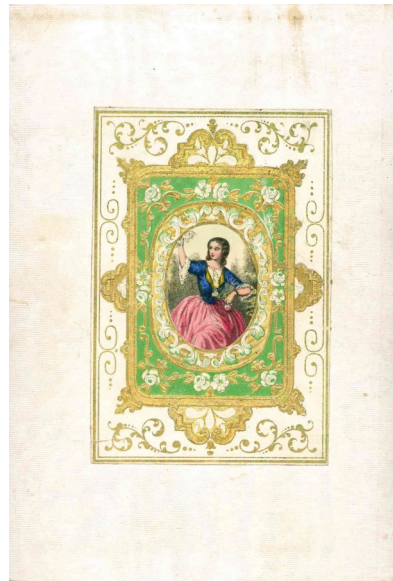
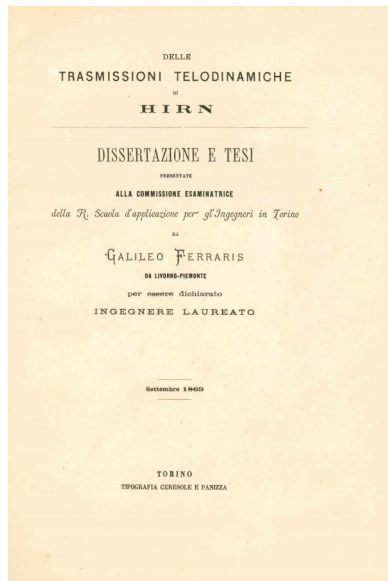




(NASA Photographs) - Collection of Official NASA Space Exploration Photographs. Two groups totaling 61 photographs, including a collection of 38 vintage gelatin silver prints from various missions to Mars including Mariner 4 (1965), Mariner 7 (1969), Mariner 9 (1971-72), and the Viking Orbiter and Lander (1976-78); and 23 vintage chromogenic prints of the Voyager 1 and 2 missions to Jupiter and Saturn (1977-1980), comprising 7 views of Jupiter, 3 of Jupiter's moons, 8 views of Saturn, and 5 of Saturn's moons, many of the photographs with detailed official NASA captions on reverse. Various sizes, most 8" x 10". Housed in two contemporary three-ring binders. Washington, D.C./Pasadena (NASA/Jet Propulsion Laboratory) 1965-1980. (48637) \$7,500

The Mariner program was designed to investigate Mars, Venus, and Mercury and was responsible for a number of firsts in American space exploration. Mariner 4 was the first successful flyby of Mars and gave us the first close-up view of Mars. Mariner 9 became the first artificial satellite of Mars, and is expected to continue to orbit the planet until at least 2022. An enlarged version of Mariner 9, Viking 1 became the first spacecraft to land successfully on Mars on July 20, 1976, and held the record for longest Mars surface mission until 2010. The Voyager program was designed to study the outer Solar System, with the two probes launching in August and September of 1977. Voyager 2 is the only spacecraft to have visited Uranus and Neptune, while Voyager 1 was the first spacecraft to enter interstellar space and is currently the farthest spacecraft (and man-made object) from Earth.

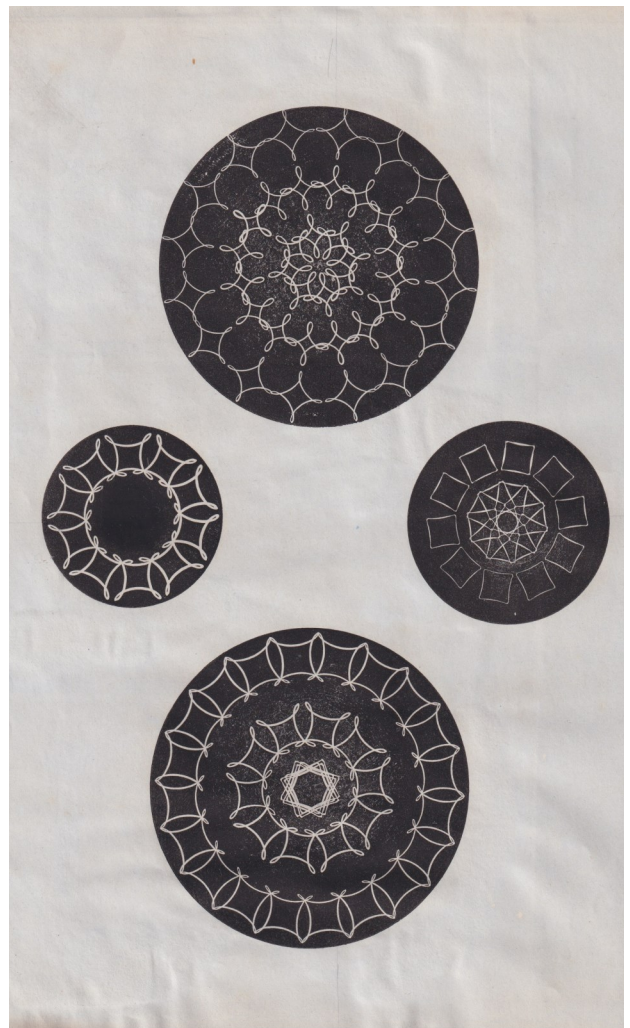
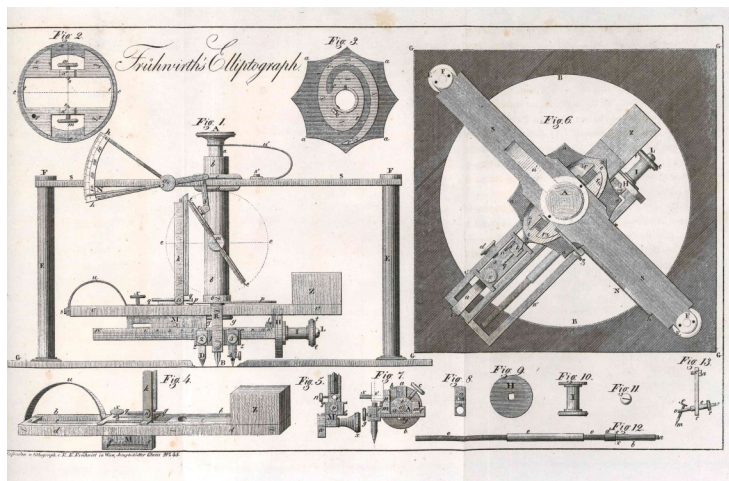
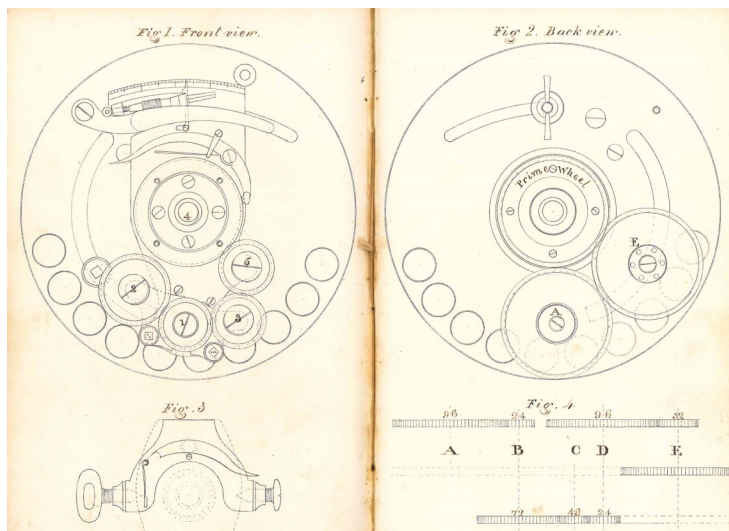




(19th Century Italian Engineering) - Ferraris, Galileo. Delle Trasmissioni Telodinamiche de HIRN. Dissertazione e Tesi presentate alla Commissione Esaminatrice della R. Scuola d'applicazione per gl'Ingegneri in Torino. Torino: Tipografia Ceresole e Panizza, 1869. Octavo (22.8 x 15.8 cm). Presentation copy in original Romantic binding of white cardstock boards with pastoral scene within a gilt-framed cartouche to front cover and hand-colored portrait of a woman to back cover; 87 pp. plus 2 large folding plates. Some minor soiling and wear to covers, including some areas of wear along spine, signatures coming loose from binding in several places, overall about very good. (52608) \$450

Scientific thesis from graduate engineering student Galileo Ferraris (1847-1897) on telodynamic transmission, including numerous equations, with two large folding plates at the back containing many detailed scale drawings and mathematical figures. Ferraris went on to be a professor, physicist, and electrical engineer, as well as one of the pioneers of the AC power system and inventor of the induction motor. He worked at the Italian Industrial Institution, the first electrical engineering school of its kind in Italy, and in 1896 joined the Italian Electrotechnical Association and became its first national president.

A beautiful presentation copy of a thesis from one of Italy's most important modern engineers.



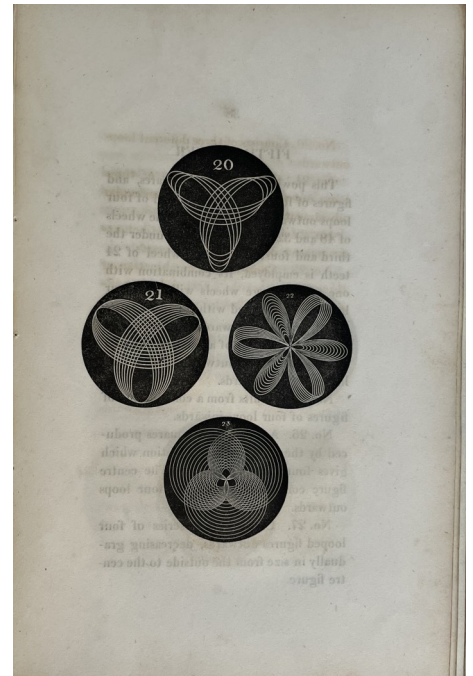
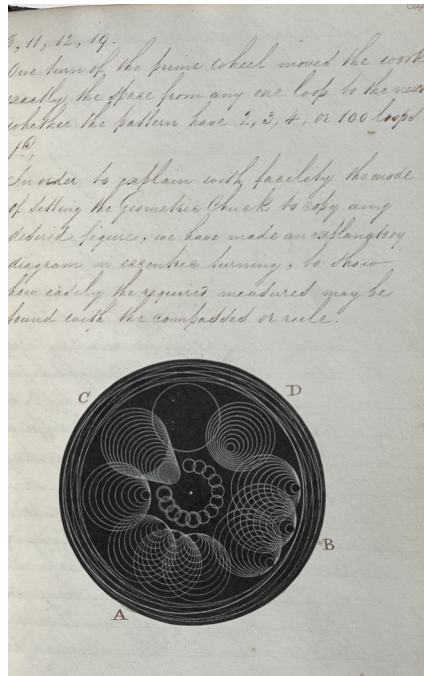
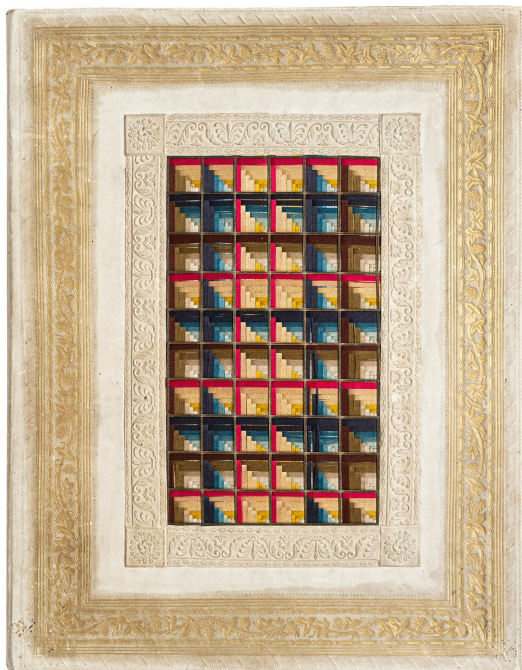
(Automated Design – Ornament and Industrialization – Precursor of Computer Graphics) - Ibbetson, John Holt and Ernest Karl Frühwirth. **Album containing 170 lithographed elliptographs, presumably in proofs. WITH: First work on the Geometric Chuck (A brief account of Ibbetson's Geometric Chuck); AND: An early publication on ellipsography (Beschreibung eines Elliptographen).** I) Collection of 170 lithographed elliptographs of various sizes and forms, presumably proof prints. Printed on 35 leaves, mainly wove paper. N.p.: n.p., ca. 1840. Quarto (23.3 × 25.5 cm) Contemporary elaborately decorated hand-bound calfskin portfolio with broad, gold-stamped ornamental borders and ornamental cartouches of paper mâché, each framing a multicolored ornamental geometric textile field on each side; the inside lids are lined with brown silk; the portfolio houses a silk-covered wrapper, which contains the volume, bound in coated laid paper; 35 leaves mounted on laid paper (bound in a quarto booklet of 20 leaves) and 5 leaves mounted on cardboard and loosely laid in.

II) Frühwirth, Ernest Karl. *Beschreibung eines Elliptographen, vermittelt dessen man alle Arten krummliniger Figuren in beliebigen Größen schnell zeichnen kann: Zum Gebrauche für Kupferstecher, Lithographen, Zeichner, Modellstecher und Kalligraphen* [Description of an elliptograph used to rapidly draw all types of curvilinear figures of any size: For use by engravers, lithographers, draftsmen, model engravers, and calligraphers]. Vienna: Anton Doll 1831. Octavo (23 × 15.5 cm). Original printed wrappers with opened original wax seal; 16 pp. With one folding copper-engraving table; very good.

III) Ibbetson, John Holt. *A brief account of Ibbetson's Geometric Chuck, manufactured by Holtzapffel & Co.: With a selection of specimens illustrative of some of its powers.* London: Holtzapffel, 1833. Octavo (21 × 14 cm). Contemporary half calf with gilt spine title; [2], 47. With 32 text lithographs (elliptographs); a double plate with elliptographs is missing at the beginning. – Bound with manuscript in ink: Charles Holtzapffel. Additional Notes on Ibbetson's Geometric Chuck. [4] pp. (technical drawing), pp. 50-77, [4] pp (table). With text lithograph (elliptograph). Binding heavily rubbed and stained; book block broken; else good. (52914) \$22,500

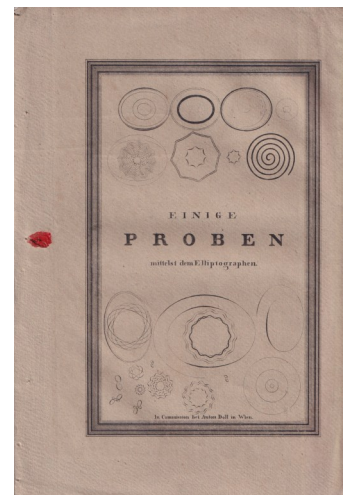
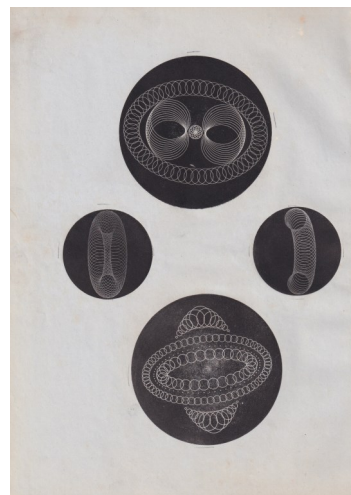
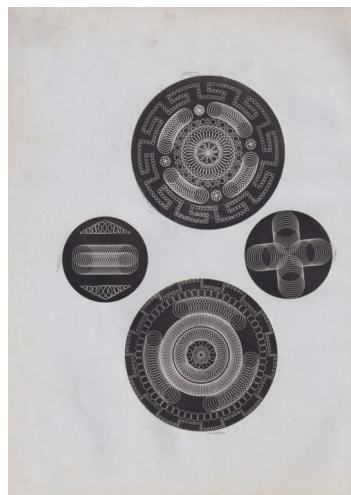
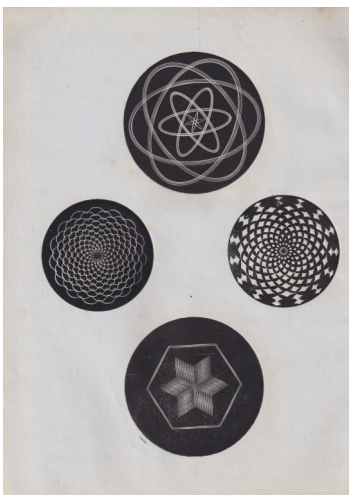
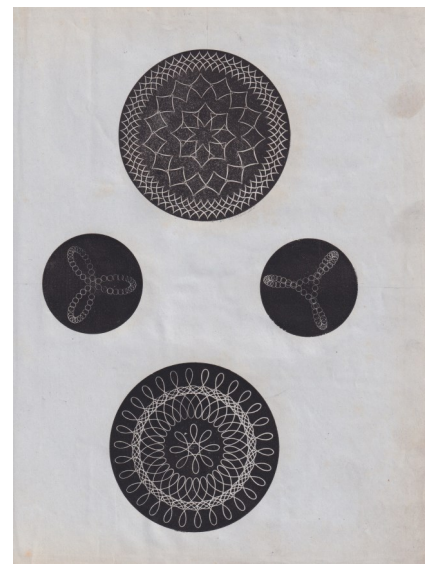
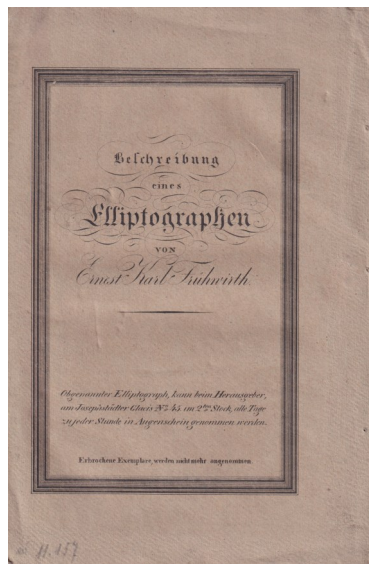
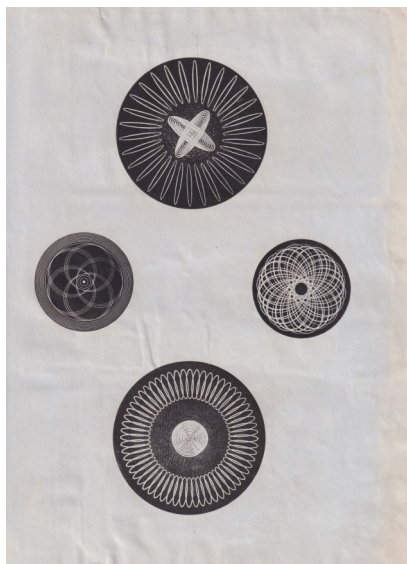
Striking collection of 170 lithographed elliptographs, which are not attributed but were possibly conceived as a collection of variations and shape patterns for the "Geometric Chuck" devised by John Holt Ibbetson. Also included are two rare first editions, with Ibbetson's "Geometric Chuck" containing an additional manuscript Charles Holtzapffel, along with some specimens, entitled "Additional Notes."

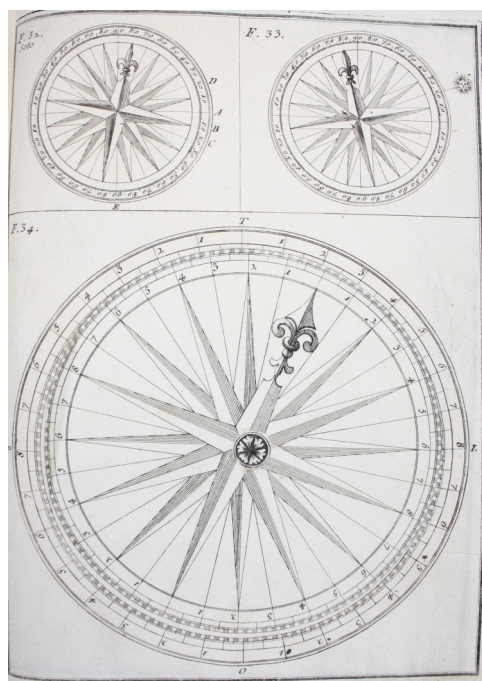
Ibbetson's "Geometric Chuck" made it possible to turn a wide variety of mathematically complex and filigree ornaments into wood completely automatically. The resulting forms and designs were of such sophistication that they could hardly be executed on paper with a compass without the designer having extensive geometric knowledge and computational skills. Ibbetson's invention of the "Geometric Chuck" is based on a technical development of the eighteenth century by the Italian mathematician Giambattista Suardi. He invented the "geometric recorder", also called elliptograph or ellipsograph. This mechanism made it possible to draw hundreds of lines, curves and cycloids on paper without having to recalculate them each time. The calculated geometric figures were stored by the mechanical device and were mechanically retrievable. Within the architecture and arts and crafts of the Rococo period, this invention provided, on the one hand, extended possibilities for complex ornamental design and, on the other hand, it also rationalized work processes. The knowledge built into the device, as it were, sometimes made the knowledge and skill of the individual designer superfluous, since it could now be retrieved and executed automatically or mechanized with little effort. The complex forms of the Rococo were thus also partly the result of a mechanization of form in the design process. With the advancing industrialization in the late eighteenth and early nineteenth century, ellipsographs became more and more sophisticated, the drawings and mechanics became more and more precise, and the possibilities of combinations became more and more diverse. Ernest Karl Frühwirth's "Beschreibung eines Elliptographen" (Description of an Elliptograph) shows an example in a copper engraving and describes it in detail. The carefully typeset and printed publication explicitly addresses designers as well as engravers, lithographers and woodcutters and advertises a new machine "for the flourishing of art". Mechanics such as those Frühwirth describes can be seen as precursors to modern databases and design software. These analog automata, like the digital devices of our time, were designed to quickly follow the rules of certain computational procedures without requiring the user to fully understand those rules. Thus, those analog computing devices mastered construction tasks that had been a great challenge for architects since ancient times. Architect Andrew Witt writes, "In a sense, these tools were like custom software applications for each of these specific design problems." (A Machine Epistemology in Architecture. Encapsulated Knowledge and the Instrumentation of Design, *Candide. Journal for Architectural Knowledge* No. 03 (12/2010), pp. 37-88., p. 67)



Ibbetson's "Geometric Chuck," developed at the beginning of the nineteenth century, went one step further. It was no longer just the design process that was supported by automation with its mechanics, but automation now also extended to manufacturing with his apparatus. The "Geometric Chuck" could turn the stored, geometrically complex and filigree figures into the wood itself. In his "brief account of Ibbetson's Geometric Chuck", he gives an extensive account of his apparatus manufactured by the London company and shows the various forms which the apparatus can execute. The designer became, in a sense, a programmer who could write the manufacturing process directly into the machine. It was therefore no exaggeration when Gottfried Semper wrote in 1851 on the occasion of the Great Exhibition in London: "The machine sews, knits, embroiders, carves, paints, reaches deeply into the field of human art and puts every human skill to shame." (p. 10) Semper was ambivalent about this development. He saw the danger of a devaluation of human labor and creativity. Ornament, he foresaw, would lose its appeal if it could be mass-produced in a standardized way. He feared above all the uniformity in architecture and the decorative arts. The abundance of technical possibilities also led to a plethora of ever-same ornaments, which could now be retrieved and reproduced without great effort. At the same time, however, Semper discovered an advantage in this development. The abundance of ornaments that could be produced cheaply held the opportunity for renewal. Semper foresaw a crisis of ornamentation. In fact, the ellipsograph disappeared from the designers' studios at the beginning of the twentieth century, and with it the technical innovation of these instruments was also forgotten.

As of May 2023, no holdings of the Frühwirth title are listed in North American libraries according to OCLC.





(18th Century Nautical Work with Volvelles) - [Alberti, Girolamo.]. **Introduzione all'Arte Nautica per Instruzione, ed Esercizio de' piloti, capitani, e comandanti di vascelli sopra il mare, e l'uso, che debbe farsi degl' istrumenti a ciò necessari. Edizione Seconda - riveduta, e diligentemente corretta.** Venice: Appresso Giambatista Albrizzi q. Girolamo, 1737. Small quarto (24.2 x 18.5 cm). Full vellum binding. Two engraved frontispieces, (xii), 291 pp. of text followed by approximately 25 pages of engraved charts, including many folding, five with moveable volvelles, and one large engraving of a galleon. Light soiling and warping to covers, some light wear along spine, minor scattered foxing and small areas of damp-staining, overall very good. (52956) \$9,500

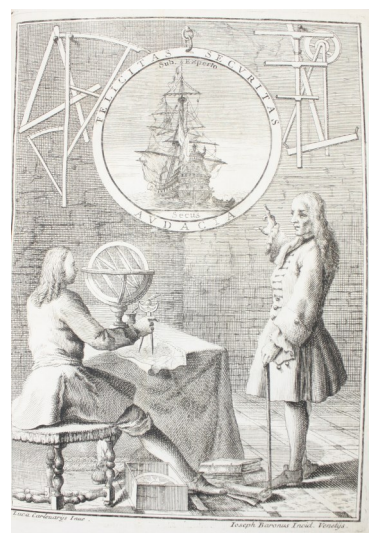
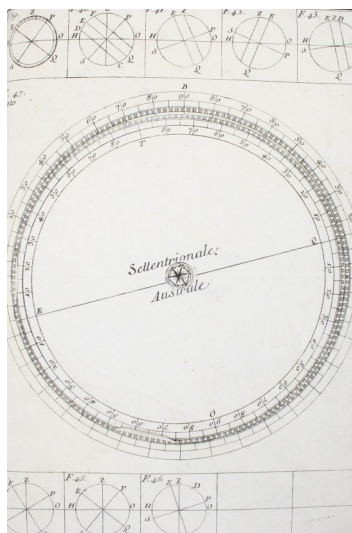
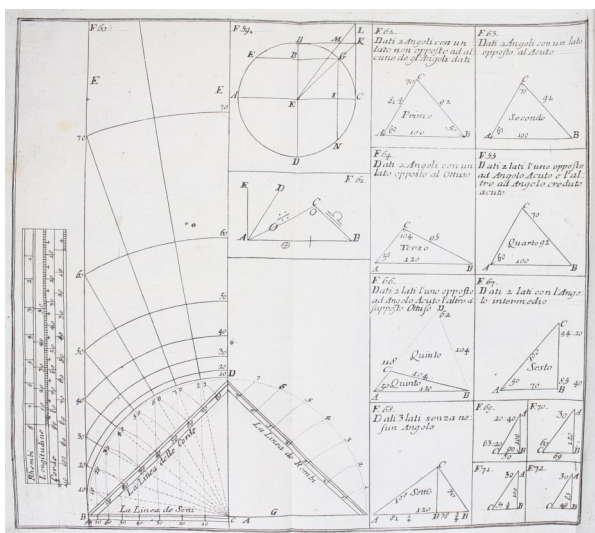
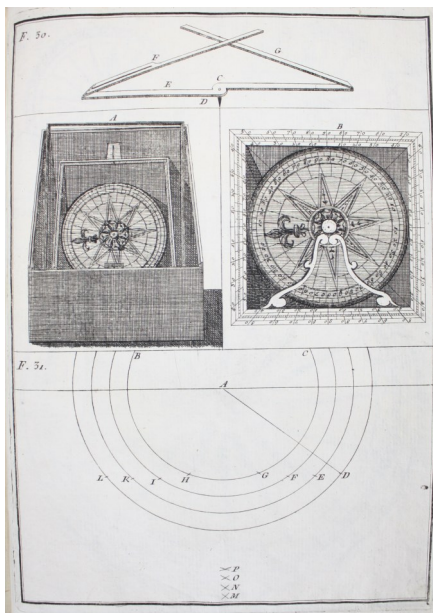
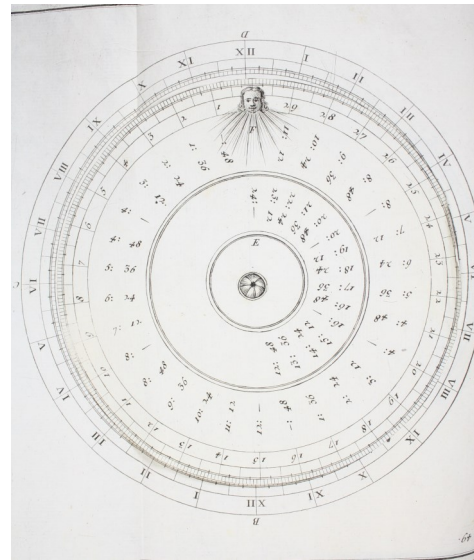
This remarkable and important volume by Girolamo Alberti (fl. 1710/1715) covers all aspects of navigation, boating, and the nautical arts, including astrology, the use of scientific instruments for plotting routes, winds, and map and chart reading. It was printed in Venice by the well-known printer Albrizzi.

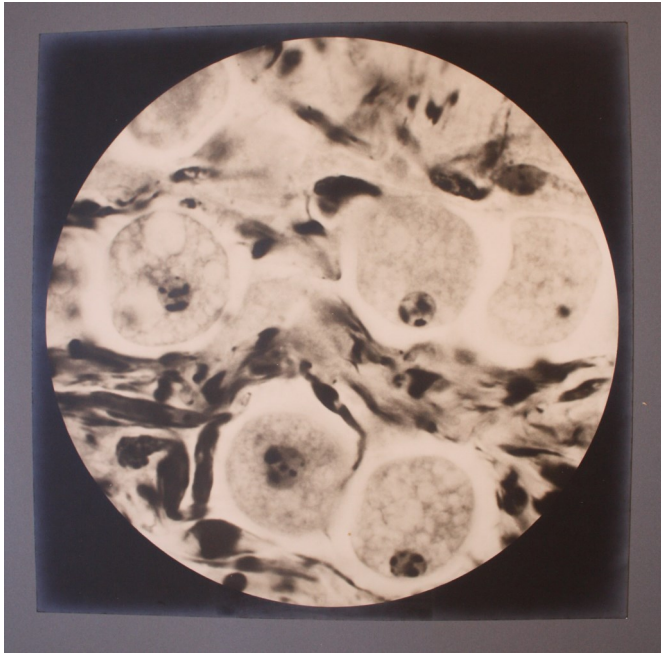
The volume contains a total of 28 copperplate engravings, primarily assorted charts, including several folding/double-page, and one folded several times depicting a Venetian galleon. This detailed engraving is accompanied by three legends identifying all of the parts of the ship. There are also five plates with moveable volvelles, and several pages of flags.

There are two beautiful frontispieces designed by Luca Carlevarijs (1663-1730) and engraved by Giuseppe Baroni. Carlevarijs was Canaletto's premier predecessor in the area of Venetian veduta. The first depicts a pair of geographers pointing to a ship within a medallion, surrounded by navigational instruments. The second is an allegorical image depicting symbolic figures including Saint Mark's Lion, the Eye of Providence, Poseidon, and a female figure holding a ship aloft above a sea of navigational books and a map of Europe. Both Carlevarijs and Albrizzi were backed by Joseph Smith (ca. 1682-1770), later the British Consul at Venice and a noted patron of Venetian art.

Very scarce institutionally; as of April 2024, OCLC locates only two holdings in North America of this edition and only six holdings of the first edition.

(Riccardi I, 14. Houzeau-Lancaster 10728. Morazzoni 211. Olschki I, 1597bis. Cicogna, 1459.)





(Infectious Disease Microphotography) - Laubenheimer, Kurt. **Photographische Wandtafeln pathogener Protozoen. Mit kurzem erläuterndem Text.** Heidelberg: Verlag von Carl Winter's Universitätsbuchhandlung, 1910. Large square folio (61.5 x 61.5 cm). Original publisher's half-cloth tie-bound portfolio, printed label mounted to cover, contents loose as issued. Small unpaginated octavo text booklet (4 pp. text and one printed plate) and 10 large original photographs (40 x 40 cm) mounted on heavy cardboard. Some light bumping to photo mounts, light soiling and bumping to portfolio, overall very good. (52978) \$9,000

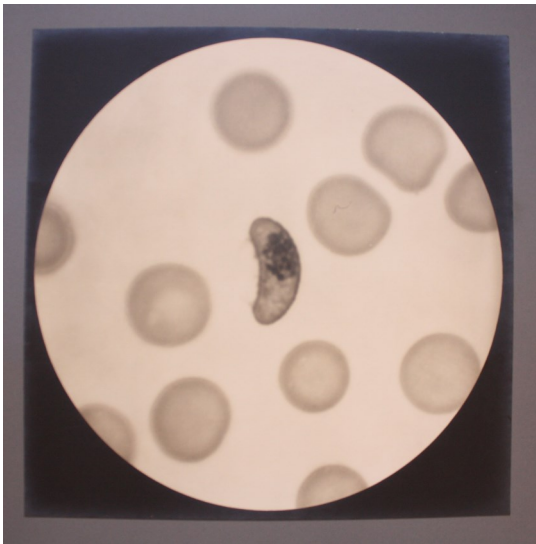
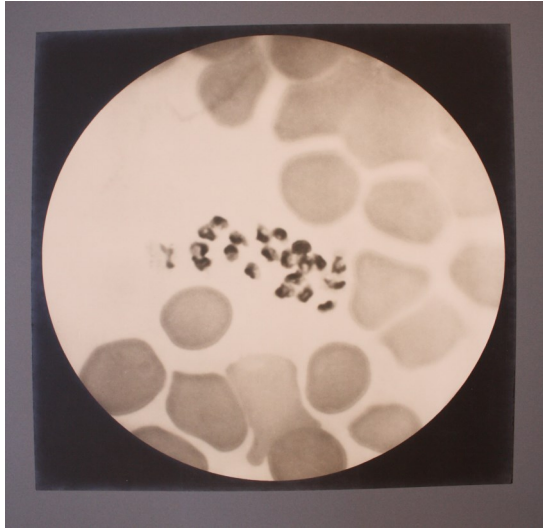
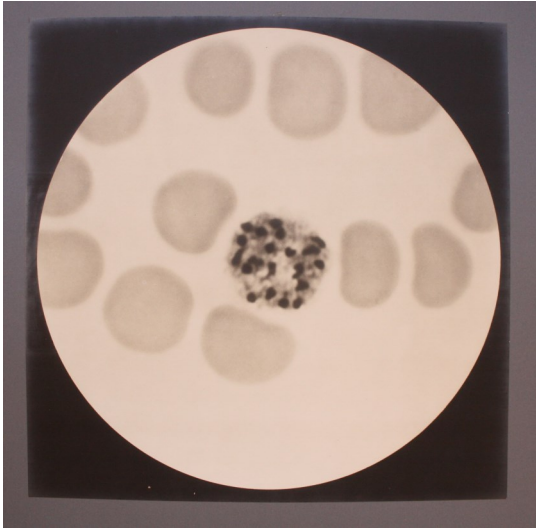
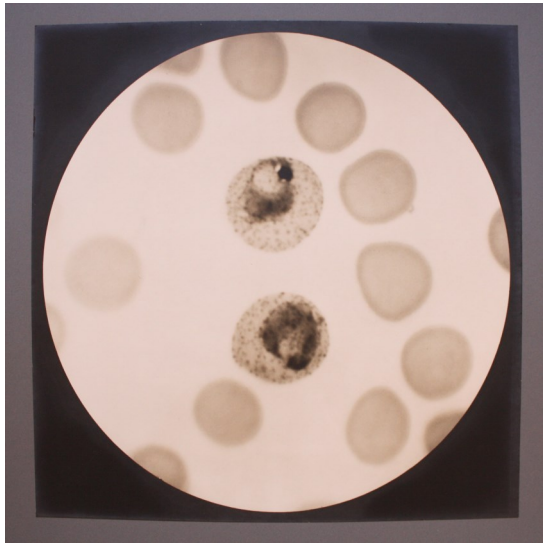
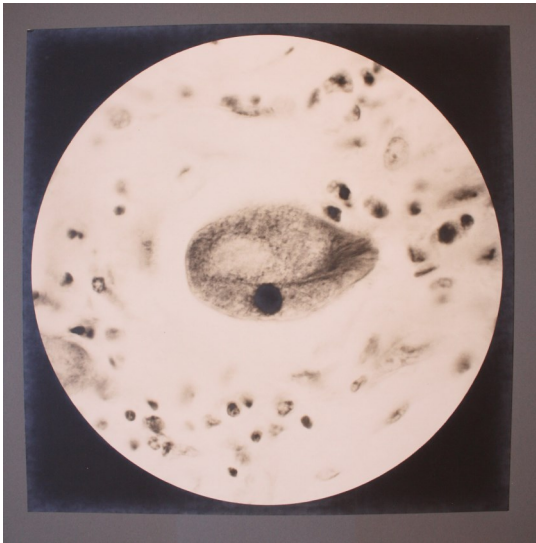
A fascinating portfolio of photographs of pathological protozoa for the purpose of education, identification, and instruction. Most protozoa are not harmful, but some of these single-celled organisms cause the infections behind several well-known infectious diseases. They can affect humans, animals, and even plants. These types of infectious diseases are often contracted in humans via insect or by contact with an infected surface or substance.

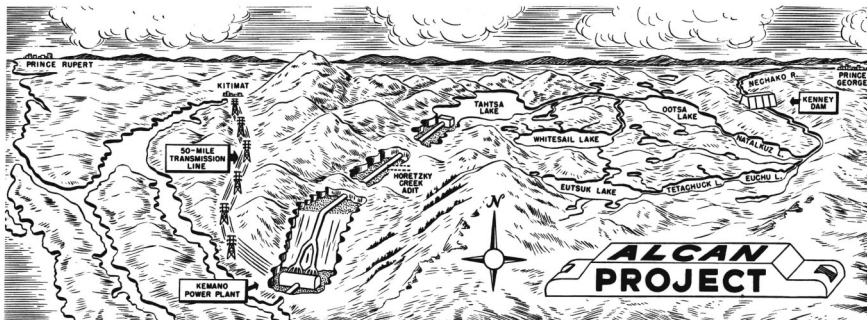
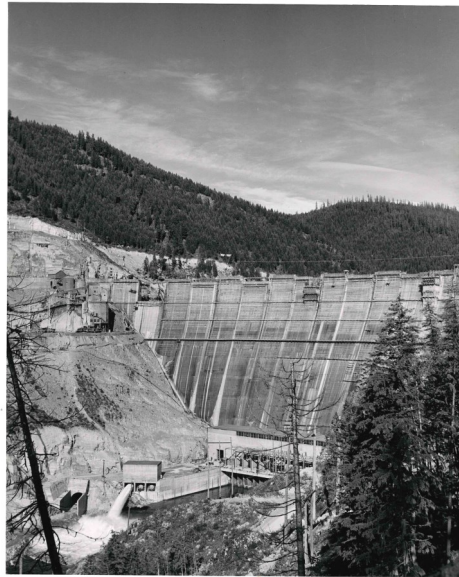
The short accompanying text booklet identifies the microorganisms depicted in the photographs: protozoa that cause malaria and tertian malaria, tropical fever, avian malaria (haemoproteus), equine trypanosomosis, dysentery, and balantidium coli/calantidiasis. They are also each identified on a label affixed to the back of each photo mount.

Dr. Laubenheimer (1877-1955) was a German microbiologist who studied parasitic protozoan organisms. He was a professor of bacteriology at Frankfurt/Main, and complete his dissertation on typhus. In 1920 he authored a textbook on microphotography, and had a long-running interest in the use of cinematography within the medical and science fields.

The large-format photographs of protozoa included in this portfolio are so oversized as to almost become abstract. The round aperture of the microscope centered in the square photograph imparts a geometric and eye-catching symmetry to each image.

An important work in the field of medicine and microbiology, this portfolio is apparently not mentioned in any medical bibliographies. It is exceedingly rare institutionally as well; as of July 2023, KVK and OCLC could locate only one single copy in any institution worldwide: the National Library of Medicine in Bethesda, Maryland.





(1950s American West) - Collection of Photographs of Engineering Projects from the Morrison-Knudsen Corporation. 32 black-and-white photographs of engineering projects undertaken by the Morrison-Knudsen Corporation during the first half of the 20th century, most with caption sheet describing the project and its location. 8 x 10 inches each. Loose as issued, currently housed in protective sleeves and an archival box. Excellent overall condition. Various places: Morrison-Knudsen Corporation, circa 1950-1955. (53156) \$2,250

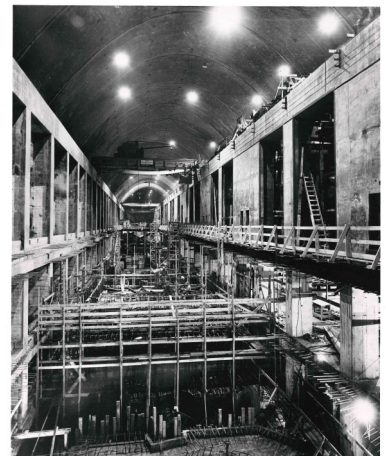
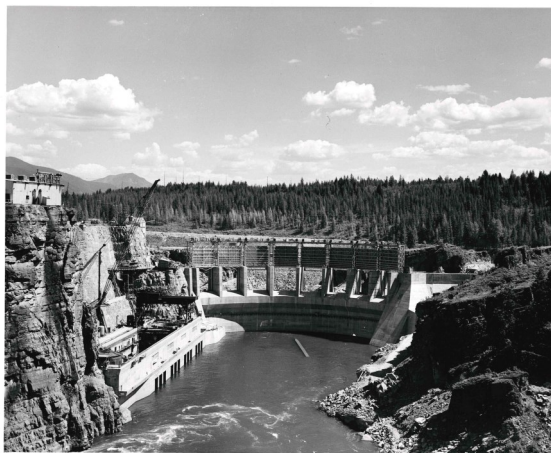
The Morrison-Knudsen Corporation was an American civil engineering and construction company headquartered in Boise, Idaho. It was founded in 1905 by Harry Morrison and Morris Knudsen, who met while working on the construction of the New York Canal (Boise Project) in southwestern Idaho. They started off small, building irrigation canals and logging roads, but throughout the company's history they were responsible for many major American construction and engineering projects, including the Hoover Dam, the San Francisco-Oakland Bay Bridge, Kennedy Space Center, and the Trans-Alaska Pipeline.

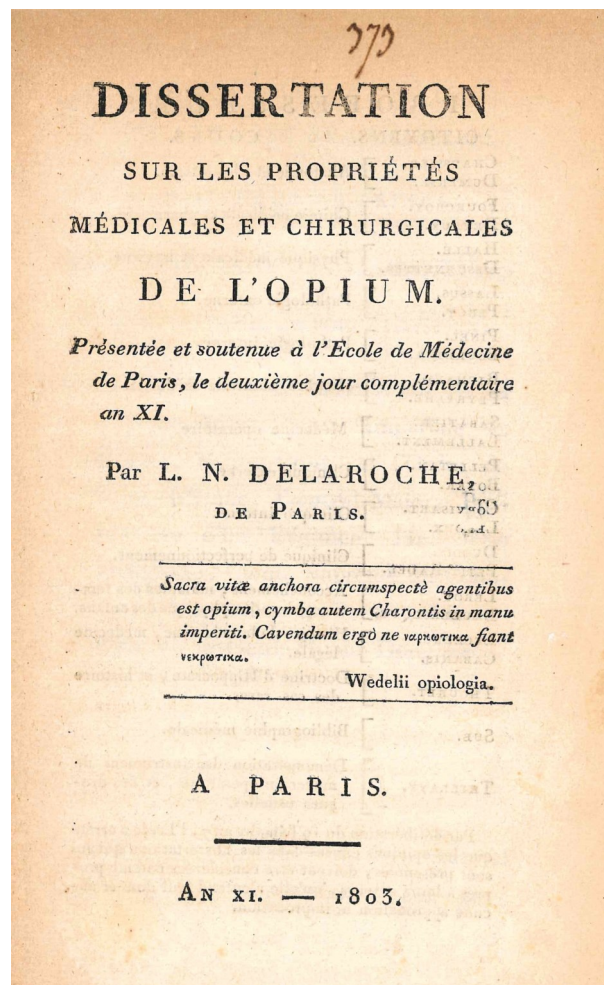
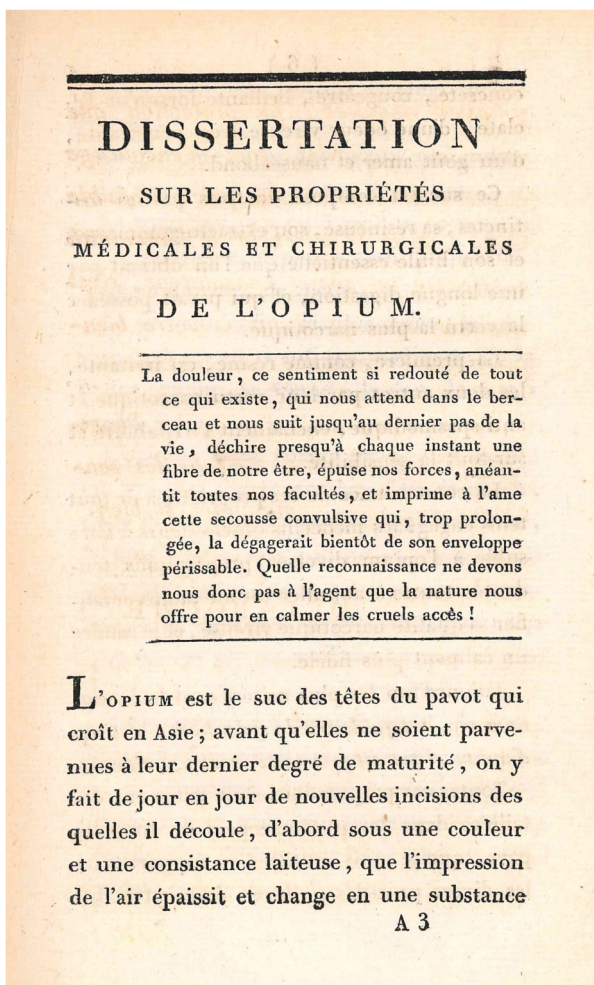
This collection of photographs focuses on the corporation's dam and tunnel projects, mostly built during the 1940s and 1950s, mostly in the Western United States. There are also several examples included from Alaska, Hawaii, Canada, New Hampshire, and Brazil, among other locations. The caption sheets which accompany most of the photographs identify certain notable details such as tile linings, arch ribs, tunnel boring machines, excavation, and the generating of hydro-electric power.

The projects depicted in these images include:

- Hoover Dam, on the border of Nevada and Arizona (2 images)
 - Broadway Tunnel, San Francisco, California (3 images)
 - Eklutna Tunnel, Anchorage, Alaska (2 images)
 - Red Hill Underground Fuel Storage Vaults, Pearl Harbor, Hawaii (1 image)
 - City Tunnel Extension, Boston, Massachusetts (1 image)
 - La Joie Dam for B.C. Electric Company, British Columbia, Canada (3 images and longer description of project)
 - Alcan Project for Aluminum Company of Canada including Kenney Dam, British Columbia, Canada (5 images plus photograph of plans, 6 photographs total)
 - Lucky Peak Dam, southwestern Idaho (1 image)
 - Cabinet Gorge Dam, Clark Fork River in Northern Idaho (1 image)
 - Cascade Dam, Idaho (1 image)
 - C.J. Strike Dam, Idaho (2 image)
 - Littleton Dam, Littleton, New Hampshire (1 image)
 - Hungry Horse Dam, Flathead River, Montana (1 image)
 - Lookout Point Dam and Powerhouse, Willamette River Near Lowell, Oregon (1 image)
 - Chief Joseph Powerhouse, Columbia River Near Bridgeport, Washington (1 image)
 - Boysen Dam, Wyoming (1 image)
 - Cubatao Underground Powerhouse, Brazil (1 image)
- Plus four images of unknown projects*

A notable collection of original photographs from one of the most important American civil engineering firms.



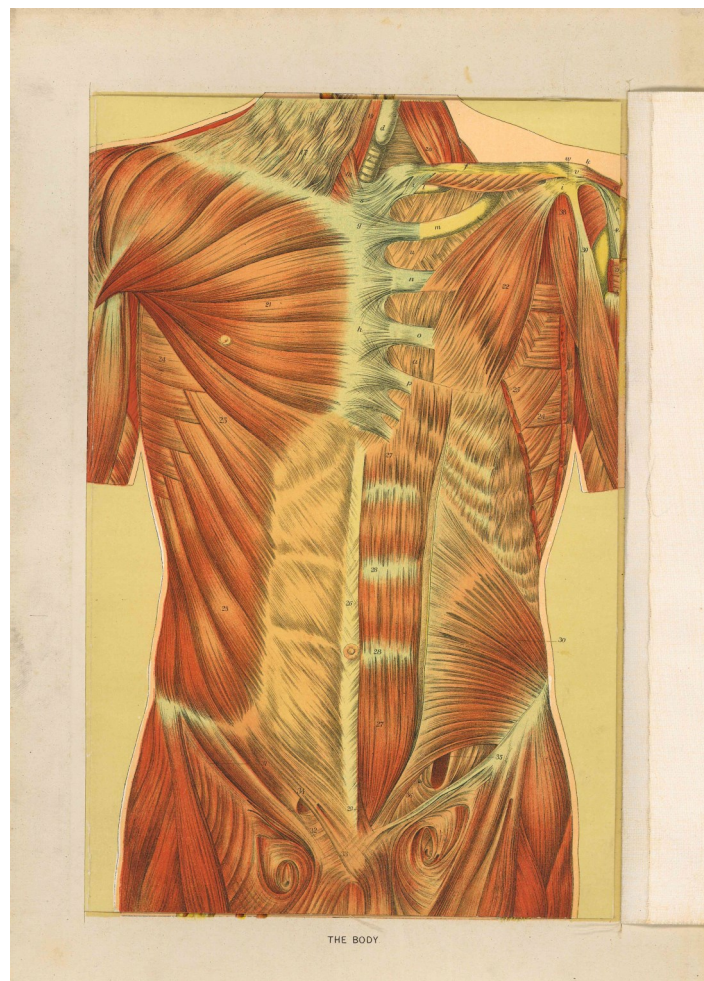
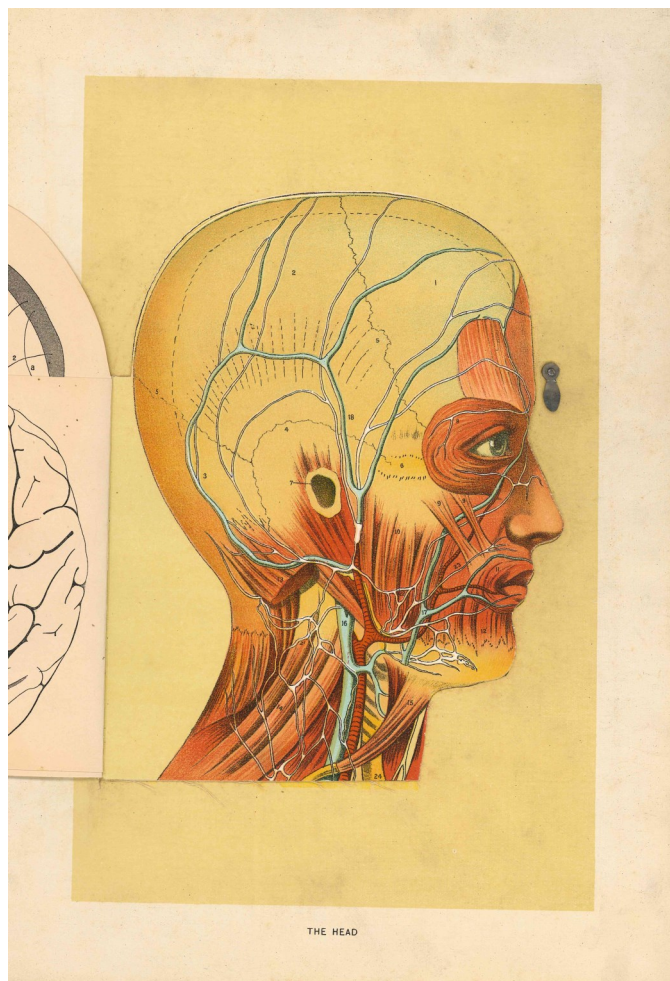


(Early 19th Century Treatise on the Medical Properties of Opium) - Delaroche, L.N. **Dissertation sur les Propriétés Médicales et Chirurgicales de l'Opium. Présentée et soutenue à l'École de Médecine de Paris, le deuxième jour complémentaire an XI.** Slim 24 pp. volume on the medical properties of opium. Octavo (7 3/4 x 4 3/4 inches). Dark green boards, gilt-stamped title label to spine. Small hole to title page, light creasing to title page, light scattered toning and foxing, overall very good. Paris: Imprimerie de Demonville et Soeurs, 1803. (53205) \$2,500

This volume represents the first edition of this rare thesis on the medical uses of opium, presented at the Paris School of Medicine and dedicated to the Hungarian prince Nicolas Estherazy de Galantha, who was a collector, writer, and patron.

Delaroche wrote this work based on examples experienced by his own patients, and argues for the virtues of opium as an internal medicine. According to Delaroche, opium is calming and anti-spasmodic, among other features. He goes on to develop the case for opium in surgical treatments and specifically for wound care. "Des diverses préparations opiatiques, l'extract gommeux dépouillé de sa résine, dissout à la dose d'un gros dans une livre d'eau de rivière, doit donc être le seul employé. Un plumasseau de charpie imbibé de cette dissolution, appliqué sur une plaie récente, aidé de la situation, des compresses graduées, des bandages unissans, le tout déterminé par la direction, la profondeur et la nature de la plaie, la guérit sans douleur, et avec d'autant plus de facilité qu'il ne se fait pendant le cours du traitement aucune perte de substance." (pp. 20-21)

Very scarce; as of June 2024, OCLC locates only one copy of this treatise in a United States library.



(Turn-of-the-Century American Anatomical Flap Book) - [Eckels, Howard S.]. **Eckels' Anatomical Aid**. Educational anatomical flap book with four color lithograph plates, four black-and-white plates, and four color lithograph pages with movable flaps. Folio (15 1/8 x 11 1/2 inches). Black pebbled cloth portfolio with metal clasp, title label affixed to front. Some light edgewear to portfolio and bumping at corners, minor fraying, light scattered soiling and spotting to interior, a couple of very minor spots of paper loss and fraying to anatomical pages, old tear to paper along crease line of body plate, overall very good condition with clean and bright images. Philadelphia: H.S. Eckels & Co., (circa 1903). (53501) \$1,950

Howard S. Eckels (1865-1937) founded his College of Mortuary Science in Philadelphia in 1895. A chemist by training, Eckels designed products and instructional items to assist in funerary practices and address the health concerns surrounding decomposition. At one point his school was also known as the Eckels College of Embalming, and together with his colleague Charles A. Genung, the two wrote "The Eckels-Genung Method and Practical Embalmer". Eckels helped to pioneer the use of formalin in embalming fluids and specialized in the use of liquid disinfectants and antiseptics with formaldehyde. Previously, embalming fluids were composed primarily of arsenic, and there was an extremely high sickness and death rate among mortuary workers. Eckels' college also instituted classes to train funeral directors and instruct them in anatomy.

The present volume is we believe an early edition of a scarce full-color anatomical aid with a number of full-color plates and pages with movable flaps. Our research shows that a version of this volume may have been published as a promotional item by Eckels and his college for expanding his marketing to medical schools, specifically to train obstetricians and gynecologists. This version appears to have been marketed towards embalmers.

The pages with movable flaps are titled:

- The Body, with views of all major systems and organs including especially detailed views of the digestive system, the lungs, the heart, and the liver
- The Head, with views of the skull, the mouth and throat, and numerous diagrams of the brain
- The Eye and Ear, two different diagrams on a single page
- Arm and Leg, with views of the circulatory, muscular, and skeletal systems

The additional color plates without flaps illustrate: "The Skeleton"; "Muscles, Veins, Arteries and Nerves"; "Diagram of Nervous System"; and "Blood Formation, Absorption and Circulation". This version also has four black-and-white plates, three of which are titled "Practical Anatomy for the Embalmer" and show the anatomy of transverse sections of the neck, arm, and leg, organs of the thoracic and abdominal cavities, and the full arterial system.

According to a 2019 post on anatomical flap books published on the website for the Royal College of Surgeons of England, as new printing technologies were invented and publishing costs decreased, the market to popularize science and medicine was expanding. Gustav Witkowski's 1876 volume "Moveable Atlas of the Human Body" was one of the first works to use double-sided printing and die-cutting to showcase the entire human body in flaps. Anatomy books with flaps were even eventually incorporated into 'home health manuals' which helped educated a woman on her responsibilities and duties as well as her health, or guided readers on health and the treatment of illness.

A fascinating educational anatomical work from the turn-of-the-century; scarce institutionally.

