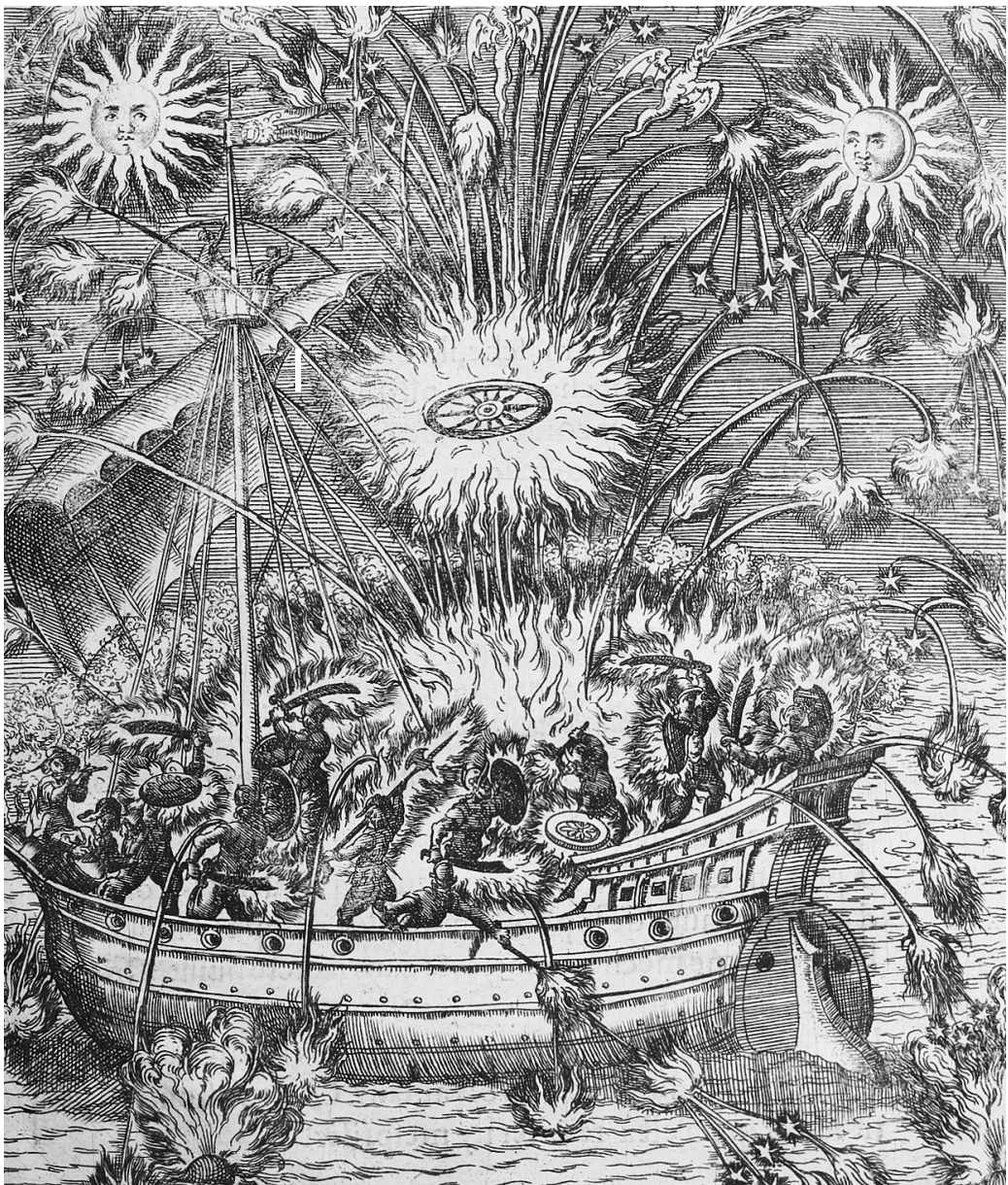
Le Zograscope

New York Antiquarian Book Fair

30 Highlights

April 2024



Le Zograscope
Alexandre Piffault

Antiquarian Books and Instruments
Sciences and Medecine

.....

5, rue de Condé
75006 Paris
France

+33 (0)6 88 77 83 66
alexandre.piffault@gmail.com
www.lezograscope.com

The shop is open from 2pm to 7pm Tuesday to Saturday,
and at other times by appointment.

Member of the SLAM and ILAB
SIRET 81882887300039 TVA FR43818828873
Crédit Mutuel - IBAN FR76 1027 8060 3900 0220 3040 119
BIC/SWIFT CMCIFR2A

1. [AMERICANA]. ZUCCHINI (Andrea), *Sulla coltura e usi dell'acacia, o robinia, Robinia Pseudo-Acacia…*
Florence, Gaetano Cambiagi, 1800.
8°, (2), 25 pages and one coloured folding plate ; original blue paper boards.

$1400

Rare and unique edition of this luxurious Italian imprint on the Robinia pseudoacacia or black locust, a tree native to the eastern United States.
It is illustrated with a large handcoloured copper-plate showing the Robinia pseudoacacia.
« Black locust is native to North America where it naturally occurred in the eastern part of the United States, with a native range consisting of two disjoint areas (Little, 1971) : the largest area corresponded to the Appalachian Mountains and partially encompasses several current States (i.e. Pennsylvania, Maryland, West Virginia, Virginia, North Carolina, South Carolina, Georgia, Alabama, Tennessee, Kentucky, and Ohio) ; the smallest area was located further west in the Ozark Mountains (i.e. Missouri, Arkansas and Oklahoma). In America, black locust was intensively displaced by the settlers due to the undeniable interest of its wood […] At the present, it is spread in every state of the contiguous USA. [..] It was introduced to Europe during the early 17th century and it is now present in all European countries. » (Xavier Bouteiller, *Une histoire écologique et évolutive du robinier faux-acacia (Robinia pseudoacacia L.) depuis son introduction en Europe*, Université de Bordeaux, 2018, chap. 1.)
Andrea Zucchini (1745-1810) was director of the Real Orto Sperimentale (Royal Experimental Garden) of Florence and Regio Direttore d'Agricoltura (Royal Director of Agriculture). First ordained priest in 1768, then canon in 1776, Zucchini was very interested in natural sciences as well as agricultural and economic problems. Attending the Accademia Etrusca, he gave several lessons on plants, experimented with crops, studied agricultural sciences and published his research. In 1784, he was entrusted with the management of the Agricultural Experimental Garden of Florence. He continued his research until his death even though the four-volume encyclopedic work, *Commentari d'agricoltura sperimentale*, in which he planned to summarise all the knowledge and experiences he had acquired in various fields and places, was never published.
A scarce botanical publication - only 3 copies listed in WorldCat.

A 17th-century giant rocket

2. APPIER HANZELET (Jean), *La Pyrotechnie de Hanzelet lorrain où sont représentés les plus rares et plus appreuvez secrets des machines et feux artificiels…,* Pont-à-Mousson, Jean et Gaspard Bernard, 1630.

4°, (4), 264 pages ; contemporary brown calf, gilt spine with raised bands, red morocco title label (some light foxing, as often - the work was printed on poor quality paper).

$3800

Second edition - entirely reworked and illustrated with 29 additional figures - of this famous treatise on military and recreational fireworks.

Appier Hanzelet had published the first edition in 1620, in collaboration with the master surgeon François Thybourel, under the title *Recueil de plusieurs machines militaires et feux artificiels pour la guerre* et la recreation. Ten years later, he republished the book under his sole name, with a different title. The second edition is entirely reworked and expanded, and contains 29 new engravings, in particular one of the most extraordinary fireworks images ever produced, showing a flame-filled ship (see illustration on front cover of catalogue).

The illustrations include a fine architectural title-frontispiece and 130 mid-page or full-page figures, most of them engraved by the author himself : sieges, ballistics, pyrotechnics, bombs, firecrackers, rockets, etc. Among the most noteworthy curiosities are the extension ladder (« l'échelle à coulisse ») (p. 158) and the Organs (« les Orgues »), where one can identify the first idea of the machine gun (p. 208).

Alternately printer, engraver and « Maître des feux artificiels » to the Duke of Lorraine, Jean Appier, know as Hanzelet, devised some very curious machines, including a metal cylinder topped with a cone, loaded with ten pounds of slow-burning gunpowder and stabilised in its course by a long wooden rod acting as a rudder (p. 239). This work is mentioned by Wernher von Braun in his *History of rocketry and space travel*.

A fine copy in contemporary binding.

Duportal, *Catalogue des livres à figures du XVIIe siècle,* n° 645 (incorrect collation) ; Duhem, *Les Origines du vol à réaction,* pl. 7 et 8 ; Cockle, *Military books*, 937.

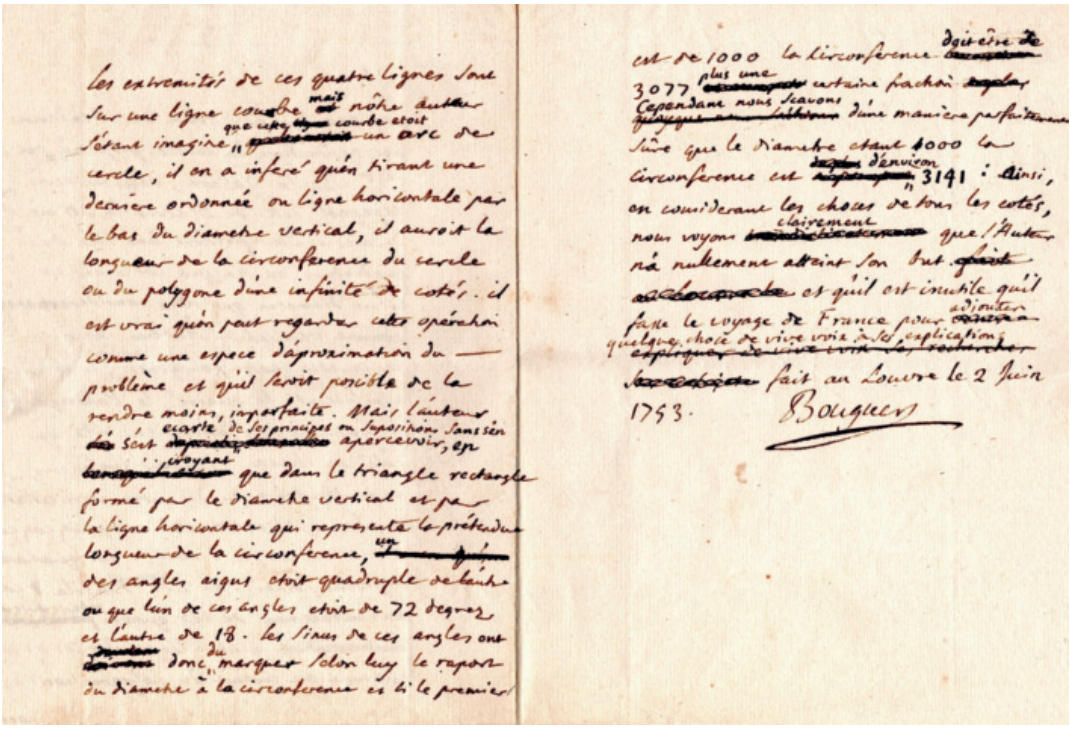
3. AUZOUX, Small size three-dimensional anatomical teaching model, circa 1920.
Height : 35cm ; 42cm on its rectangular wooden stand.

$4000

Extremely rare example of the smallest existing (?) Auzoux anatomical model, in papier mâché, with removable organs.

The model is datable circa 1920. It is well preserved with a fine patina and complete with all its organs. The skullcap can be removed but the brain is fixed.

A rare Auzoux model of general human anatomy.



4. BOUGUER (Pierre), Autograph manuscript signed, [Paris], Le Louvre, 2 June 1753. 4°, 2 pages ½ ; inscription in a contemporary secretarial hand in upper margin : « 2 juin 1753 Quadrature de D. Basillio Gascon ».

$5000

Scarce scientific manuscript by Pierre Bouguer on squaring the circle, a classic mathematical problem since Euclid.

He demonstrates that the squaring proposed to the Académie royale des Sciences by the Spaniard Don Basilio Gascon « in a Spanish document dated Madrid, 20 April last [1752] » is neither mathematically nor methodologically correct or acceptable. In 1882, Ferdinand von Lindemann proved that squaring the circle was an insoluble mathematical problem.

Bouguer begins by explaining Gascon's method : « Pour prendre une idée de cette quadrature, on n'a qu'à concevoir un cercle et un diamètre que nous considerons comme vertical. L'auteur inscrit dans ce cercle quatre polygones reguliers, le triangle équilatéral, le quarré [sic], le pentagone et l'exagone [sic], en faisant en sorte qu'un côté de chacun, sçavoir l'inférieur, soit perpendiculaire au diamètre vertical du cercle. Ces quatre côtés coupent, comme il est évident, le diametre en quatre differens points ; et Don Basile tire horizontalement de ces quatre intersections quatre lignes droites égales chacune au circuit du polygone correspondant. Les extrémités de ces quatre lignes sont sur une ligne courbe mais nôtre auteur s'étant imaginé que cette courbe était un arc de cercle, il en a inféré qu'en tirant une dernière ordonnée en ligne horizontale par le bas du diamètre vertical, il auroit la longueur de la circonférence du cercle ou du polygone d'une infinité de côtés. Il est vrai qu'on peut regarder cette opération comme une espèce d'aproximation du problème et qu'il seroit possible de la rendre moins imparfaite ».

However, the great French mathematician explains that Gascon « has strayed from his principles or assumptions without realising it » : « en croyant que dans le triangle rectangle formé par le diamètre vertical et par la ligne horizontale qui represente la prétendue longueur de la circonférence, un des angles aigus étoit quadruple de l'autre ou que l'un de ces angles étoit de 72 degrés et l'autre de 18. Les sinus de ces angles ont donc du marquer selon luy le raport du diamètre à la circonference et si le premier est de 1000 la circonférence doit être de 3077 plus une certaine fraction. Cependant nous scavons d'une manière parfaitement sûre que le diamètre étant 4000 la circonférence est d'environ 3141 ; ainsi, en considerant les choses de tous les cotés, nous voyons clairement que l'Auteur n'a nullement atteint son but ». Bouguer therefore concludes « that there is no need for him to make the trip to France and add anything in person to his explanations. »

Bouguer added numerous corrections and additions to his own manuscript, which shows that this was a working manuscript and a first draft. These elements also materialise the virtuosity of his mathematical reasoning.

Don Basilio Gascon Cisneros led a military career in the Asturias infantry regiment of the Spanish army. Not much is known about his life. He was a sergeant at Veracruz, Mexico, until 1771 when he returned to Spain. In 1773 he published his Spanish translation of Vaultier's *Observations sur l'art de faire la guerre*. He later became colonel of the Asturias regiment. Acting commander general of Oran, he died with his entire family in the earthquake of 1790. We can assume that when he sent his paper on squaring the circle to the Académie royale des Sciences in 1752, he was a student at a military school.

Pierre Bouguer (1698-1758) was a versatile French scientist best remembered as one of the founders of photometry, the measurement of light intensities. Bouguer was a prodigy trained by his father in hydrography and mathematics. Upon his father's death, at the age of 15, he succeeded him as royal professor of hydrography. During the 1720s he made some of the earliest measurements in astronomical photometry. He formulated Bouguer's law (sometimes called Lambert's law), regarding the attenuation of a light beam in a transparent medium, which he published in his *Essai d'optique sur la gradation de la lumière* (1729). In 1735 he set off on an expedition with La Condamine to measure an arc of the meridian near the Equator in Peru ; he used the results obtained to make a new determination of the Earth's shape (published in his essay *La Figure de la terre*, 1749). In 1748, he built one of the first heliometers, a telescope used to measure the Sun's diameter and the angles between celestial bodies. He also devoted much of his life to the study of nautical problems. (Britannica)

A very rare scientific autograph manuscript by one of the great French travellers, hydrographers and astronomers of the 18th century : « Il y a peu d'archives personnelles de Bouguer, celles-ci ayant disparu dès son décès, en 1758. » (Danielle Fauque, « Pierre Bouguer, figure emblématique ou savant singulier ? », *Revue d'histoire des sciences*, 2010/1, volume 63, page 6.) It has remained in private hands since the end of the 19th century.

Provenance : Charavay, *Revue des autographes, des curiosités de l'histoire et de la biographie*, no. 215, June 1898, no. 45 ; private collection until now.

With a drawing of a Pythagoras wheel by a 17th-century reader

5. CATTAN (Christophe), *La Géomance du Seigneur Cristofe de Catan Gentilhomme Genevoys livre non moins plaisant et récréatif que d'ingénieuse invention pour scavoir toutes choses présentes, passées et à advenir,* Paris, Gilles Gilles, 1558.

4°, (8), 178, (2) leaves ; 17th-century brown sheep, gilt spine with raised bands (spine and extremities repaired ; restoration and small brown stains to upper margin of the first 3 leaves, dampstain to upper corner of the last 20 leaves, a few tears repaired withouth loss). The original last table leaf was cut out and pasted on the rear inner board.

$5000

Uncommon first edition of one of the most famous and comprehensive books of divination.

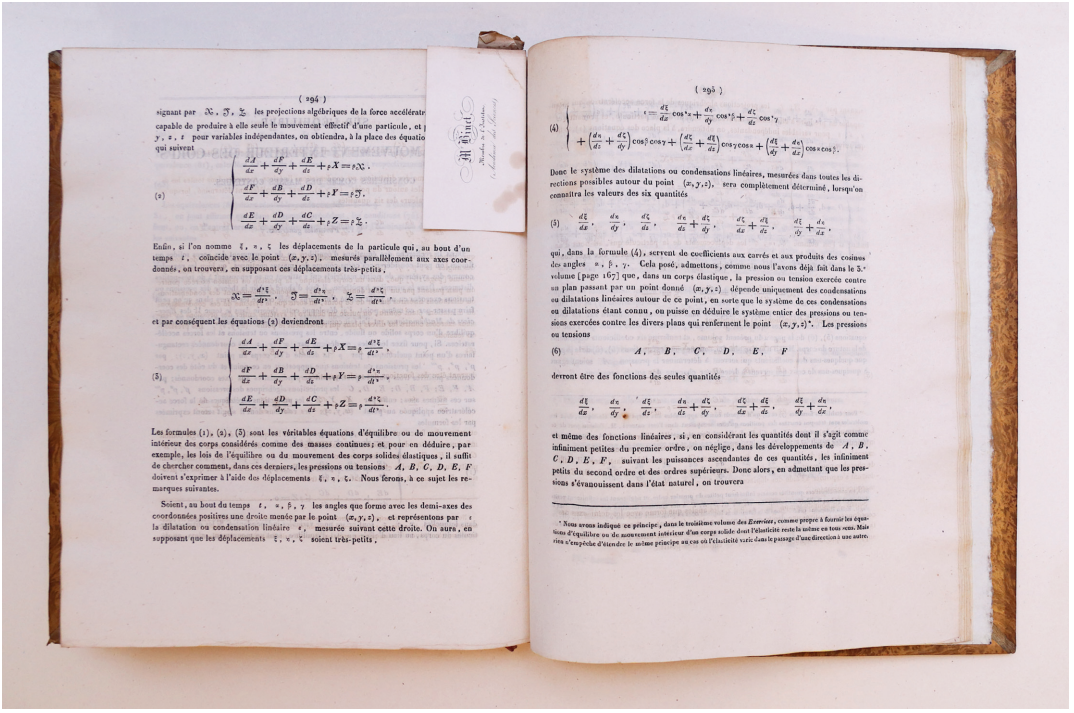
The title has a fine ornamental frame engraved by Jean Cousin the Elder, signed « C », probably in the first state. This engraved frame was probably ordered to the artist by the Parisian printer and bookseller Gilles Gilles, who often reused it between 1558 and 1574, in particular for his other edition of La Géomance (Robert Brun, *Le Livre illustré de la Renaissance,* 150).

The text is illustrated with numerous woodcuts, including astrological figures, diagrams and tables. Perhaps the most interesting is the famous Pythagoras wheel (l. 175v) : Brun points out that it is decorated with « fleurons similar to those on some fine contemporary bindings ». This wheel is supposed to give answers to a wide variety of questions : if you will be happy with your friend ; if a horse will win the race, etc.

« A book-length treatise on geomancy, with examples of geomantic tableaux cast by Cattan for his acquaintances at the French court. The text describes the method of casting the points and forming the figures ; discusses the meanings of the figures and their correspondences with elements, animals, planets, etc. ; summarizes the questions appropriate to each house (with examples) ; and thoroughly covers the various ways to interpret the tableau. » (Elizabeth Bennet, online bibliography of medieval and Renaissance books on Geomancy, Princeston website)

The title page bears a cancelled ownership inscription dated 1695. It was probably the same reader who added 3 manuscript leaves at the end of the copy. The first leaf contains the drawing of a Pythagoras wheel, followed by a series of questions different from those that can be found in Cattan's treatise : how many months, weeks or days will it take to complete a deal ; what is the meaning of a dream ; whether someone is dead or alive…

Dorbon n° 646 ; Caillet I, 2093.



Copy of the French mathematician Jacques Philippe Marie Binet ?

6. CAUCHY (Augustin Louis), *Exercices de mathématiques,* Paris, De Bure, 1826-1829. 4°, 4 volumes, I. (2), II, 357, (3) pages ; II. (2), II, 376, (4) pages ; III. (2), 368, (4) pages [gap in page numbering between 22 and 25] ; IV. (2), 1-54, 49-319, (5) pages ; contemporary half-sheep (spines rubbed, hinges partly split, headcaps a little chipped).

$1600

The first volumes of the mathematical journal founded by Cauchy in 1826.

In this important and personal periodical, Cauchy makes fundamental contributions to mathematics with many original theories : the calculus of residues, an astonishing theory of light, the foundation of group theory, and his personal input for the solution of partial differential equations.

“In 1826 Cauchy began to publish his *Exercises de Mathématiques*, which was essentially a mathematical periodical consisting entirely of papers written by himself ; it appeared at approximately monthly intervals until 1830. [...] Some of the work appearing in the *Exercices* is expository in character, but much of it contains original research. In particular, as we shall see, his main contributions to what he called the calculus of residues are to be found there.” (Smithies, *Cauchy and the Creation of Complex Function Theory,* p. 113.)

“[In his *Exercices de mathématiques,* Cauchy] use, for the first time, the term résidu for the limit, and the term résidu intégral for the sum of all residues in a certain region.” (Mitrinovic and Keckic, *The Cauchy Method of Residues. Theory and Applications*, volume 1, page 331.)

“The term itself and the formal definition of a residue are first encountered in the paper ‘Sur un nouveau genre de calcul analogue au calcul infinitésimal’ (*Exercices de Mathématiques*, Paris, 1826, volume 1). Here, Cauchy introduces and defines this new

concept [...] After this paper Cauchy wrote a large number of other papers placed in this and later volumes of his Exercices de mathématiques, in which he studied the applications of the theory to the computation of integrals, differential equations, the expansion of functions in series and infinite products, theory of equations, and so forth." (*Mathematics of the 19th Century*, vol. II : Geometry, Analytic Function Theory, p. 132).

Bound in contemporary half-sheep, the present copy has a particularity : paper tabs inserted in the volumes, especially the second and fourth. Two of them have printed letterheads : "Imprimerie Bachelier" and "Académie de Paris. Faculté des sciences". Several contain manuscript mathematical annotations or comments, one of which is dated 1851. These tabs show that the first owner was a conscientious reader and a mathematician connected to the University of Paris and the printer Bachelier, who specialised in scientific publications. In addition, the visiting card of "M. Binet Membre de l'institut (Académie des Sciences)" can be found between pages 294 and 295 of the fourth volume. It left a yellow mark on the paper, proving it has remained in this place for a long time, probably since the middle of the 19th century.

Given these elements, we may say that the first owner was probably the French mathematician and physicist Jacques Philippe Marie Binet, or someone connected to him in the first half of the 19th century.

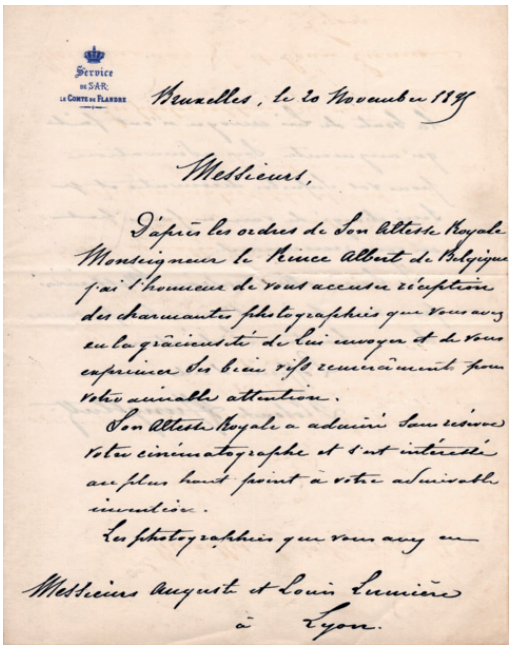
Binet made pioneering contributions to number theory and the mathematical foundations of matrix algebra in the wake of Cauchy's own research, in particular the Cauchy-Binet formula and Cauchy-Binet theorem. He was also close to Cauchy's political opinions.

An interesting association copy.

A fifth volume of the *Exercices de mathématiques* was published in 1830, which is not present here.

The first European tour of the Cinématographe : three important letters exemplifying the early promotion and irresistible success of the Lumière brothers' invention.

The next three items of this catalogue are letters from the collection of Dr Paul Génard. A great collector of early films and projection devices, and leading authority on the Lumière brothers, he was the founder and first director of the Musée du Cinéma in Lyon in 1966. These letters represent major historical primary sources as very few contemporary materials have survived the destruction of the Lumière factories which housed the archives of the company. They express the immediate enthousiasm for the Cinématographe and show in negative the Lumière brothers as businessmen, organising the promotion of their invention abroad even before the first public projection, which took place on 28 December 1895 in Paris (see no. 7).



Service de S.A.R. le Comte de Flandre

Bruxelles, le 20 Novembre 1895

Messieurs,

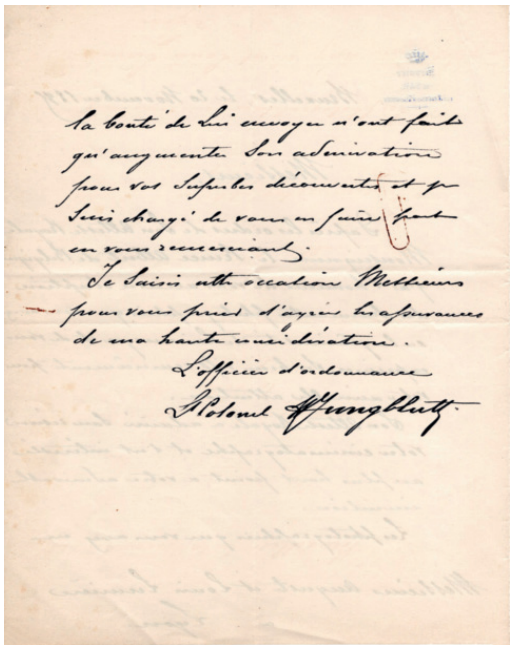
D'après les ordres de Son Altesse Royale Monseigneur le Prince Albert de Belgique j'ai l'honneur de vous accuser réception des charmantes photographies que vous avez eu la gracieuseté de lui envoyer et de vous exprimer les bien vifs remerciements pour votre aimable attention.

Son Altesse Royale a admiré sans réserve votre cinématographe et s'est intéressé au plus haut point à votre admirable invention.

Les photographies que vous avez eu

Messieurs Auguste et Louis Lumière

à Lyon.



la bonté de lui envoyer m'ont fait
qu'augmenter son admiration
pour vos superbes découvertes et je
suis chargé de vous en faire part
en vous remerciant.

Je saisis cette occasion Messieurs
pour vous prier d'agréer les assurances
de ma haute considération.

L'officier d'ordonnance

Colonel Jungbluth.

The very first projections of the Cinématographe abroad - in Belgium

7. [CINEMA. LUMIÈRE BROTHERS]. JUNGBLUTH (Harry Alfred), Autograph letter signed to « Messieurs Auguste et Louis Lumière, à Lyon », in French ; Brussels, 20 November 1895.

4°, 1 page 3/4. Ink on letterhead paper « Service de S. A. R. le Comte de Flandre ».

$2800

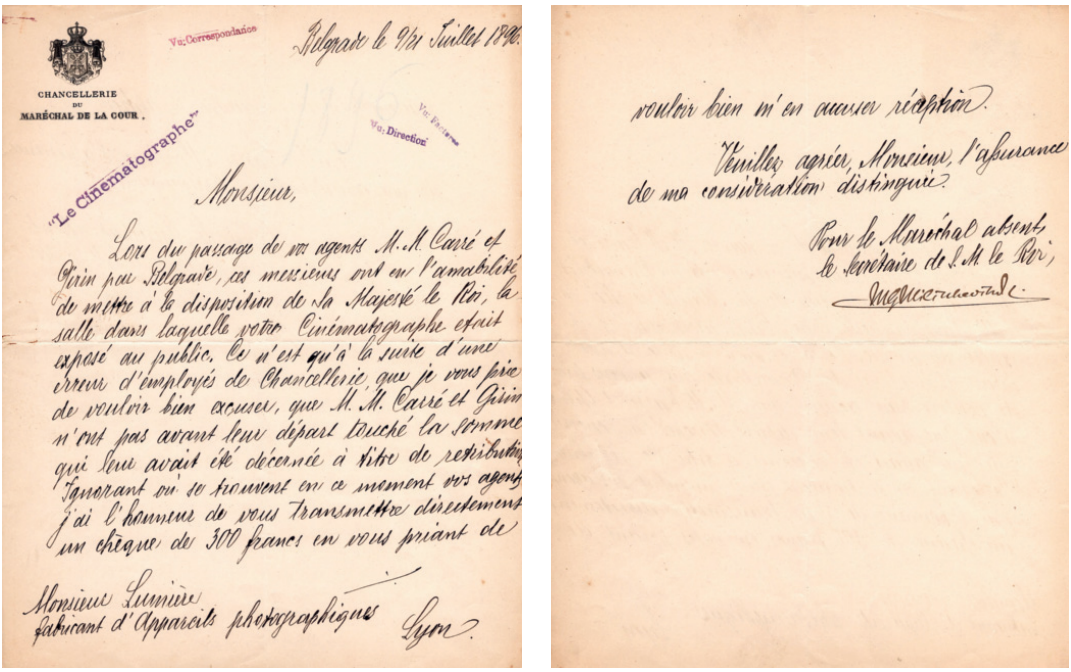
Letter of thanks for the photographs offered to Albert of Belgium, also conveying the Prince's admiration for the Cinématrographe.

Jungbluth acknowledges receipt of the photographs sent by the Lumière brothers to Prince Albert, the future king of Belgium, who greatly appreciated them. The photographs mentioned here were probably examples of their attempts to create colour images using the trichrome process, which they mastered in 1898.

The letter also expresses the Prince's great interest for the Cinématographe, which he had been able to admire during the second Belgian projection of the Lumière's invention in Leuven on 12 November 1895. At the very earliest stages of cinema, the young Prince Albert proved to be a knowledgeable film enthusiast. He quickly grasped its potential to give him exposure. The first filmed images of his reign date back to his swearing-in in 1909.

Belgium was the first country outside of France to get a demonstration of the Lumière Cinématographe in 1895. It was a private projection organised by the Belgian Association for Photography organised in Brussels on 10 November. Two days later, another screening took place in Leuven at the Waux-hall theatre, in the presence of Prince Albert (see Liste des 12 projections Lumière précédant la première publique et payante du 28 décembre 1895 au Salon Indien du Grand Café à Paris on the Institut Lumière website.)

Lieutenant Colonel Harry Jungbluth (1847-1930) was Prince Albert's personal mentor and guide. He acted as head of the military household of the King between 1912 and 1930.


CHANCELLERIE
DU
MARÉCHAL DE LA COUR.

Vu: Correspondance

Vu: Direction

"Le Cinématographe"

Belgrade le 9/21 Juillet 1896

Monsieur,

Lors du passage de vos agents M.M. Carré et Girin par Belgrade, ces messieurs ont eu l'amabilité de mettre à la disposition de Sa Majesté le Roi, la salle dans laquelle votre Cinématographe était exposé au public. Ce n'est qu'à la suite d'une erreur d'employés de Chancellerie, que je vous prie de vouloir bien excuser, que M.M. Carré et Girin n'ont pas avant leur départ touché la somme qui leur avait été décernée à titre de rétribution. Ignorant où se trouvent en ce moment vos agents j'ai l'honneur de vous transmettre directement un chèque de 300 francs en vous priant de

Monsieur Lumière
fabricant d'Appareils photographiques
Lyon

vouloir bien m'en accuser réception.

Veuillez agréer, Monsieur, l'assurance de ma considération distinguée.

Pour le Maréchal absent
le Secrétaire de S.M. le Roi,

Presentation of the Cinématographe to the King of Serbia

8. [CINEMA. LUMIÈRE BROTHERS], Manuscript letter to « Monsieur Lumière, fabricant d'appareils photographiques, Lyon », in French, signed by the secretary of King Alexander I of Serbia, Belgrade, 9/21 July 1896.

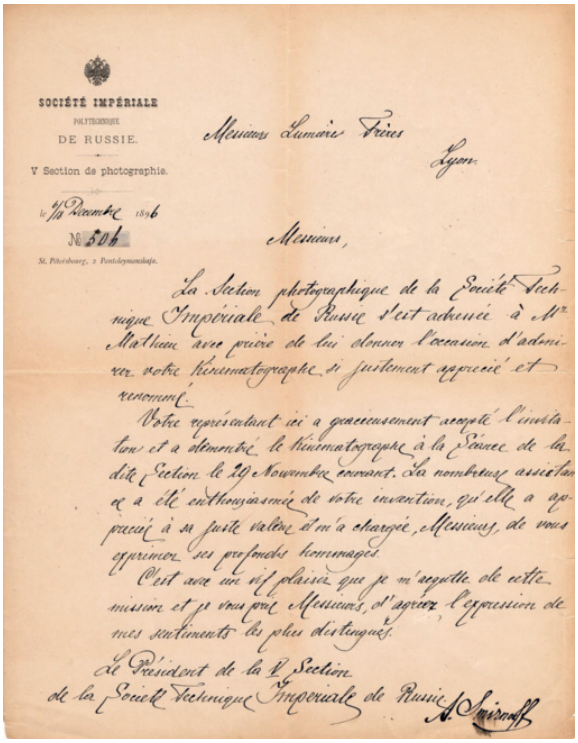
Large 4°, 1 page 1/2. Ink on letterhead paper « Chancellerie du Maréchal de la Cour ». Ink stamp : « Le Cinematographe ».

$1900

Letter of thanks for the private film screening given by the Lumière brothers agents Carré and Girin to King Alexandre I of Serbia.

The Chancellery of the Chamberlain of the Household (« Chancellerie du Maréchal de la Cour ») is also sending a cheque for 300 francs in payment for their presentation of the cinematograph to the King of Serbia.

« In the capital city of the Kingdom of Serbia, Belgrade, the Lumière cinematograph was shown to the public on 25 May 1896 (Julian calendar)/ 6 June 1896 (Gregorian calendar) at the coffeehouse Zlatni Krst on Terazije, the city's central boulevard and a very popular and well-frequented social space. […] The screenings were organized by the [Lumière brothers] representatives André Carré (photographer), Jules Girin (mechanic), and A. Velhore (salesman) from Lyon. 'Due to great public demand' the organizers increased the shows and prolonged their stay to 25 days, so that other visitors who were in Belgrade for the occasion of the Montenegrin king Nikola's visit, would have the opportunity to see the films. André Carré (1869–1939) was a merchant from Lyon, who travelled to Serbia, Croatia, and Romania on several occasions as the Lumière brothers' representative in 1896 and 1897, showing moving pictures on the Cinematograph. He filmed first views of events and important sights of Belgrade in 1897, which were screened at the time, but have not been preserved. » (Ana Grgić, Early Cinema, *Modernity and Visual Culture,* Amsterdam University Press, 2022, pp. 86-87).



SOCIÉTÉ IMPÉRIALE
POLYTECHNIQUE
DE RUSSIE.

V Section de photographie.

le 6/18 Décembre 1896
№ 506

St. Pétersbourg, 2 Pantéleymonskaja.

Messieurs Lumière Frères
Lyon

Messieurs,

La Section photographique de la Société Technique Impériale de Russie s'est adressée à Mr. Mathieu avec prière de lui donner l'occasion d'admirer votre kinématographe si justement apprécié et renommé.

Votre représentant ici a gracieusement accepté l'invitation et a démontré le kinématographe à la séance de ladite Section le 29 Novembre courant. La nombreuse assistance a été enthousiasmée de votre invention, qu'elle a appréciée à sa juste valeur et m'a chargée, Messieurs, de vous exprimer ses profonds hommages.

C'est avec un vif plaisir que je m'acquitte de cette mission et je vous prie, Messieurs, d'agréer l'expression de mes sentiments les plus distingués.

Le Président de la V Section
de la Société Technique Impériale de Russie
N. Smirnoff

The Russian debuts of the Cinématographe

9. [CINEMA. LUMIÈRE BROTHERS]. SMIRNOFF (Alexander), Letter signed to « Messieurs Lumière Frères, Lyon », in French, St. Petersbourg, 6/18 December 1896. Large 4°, 1 page. Ink on letterhead paper « Société impériale polytechnique de Russie, V. Section photographie ».

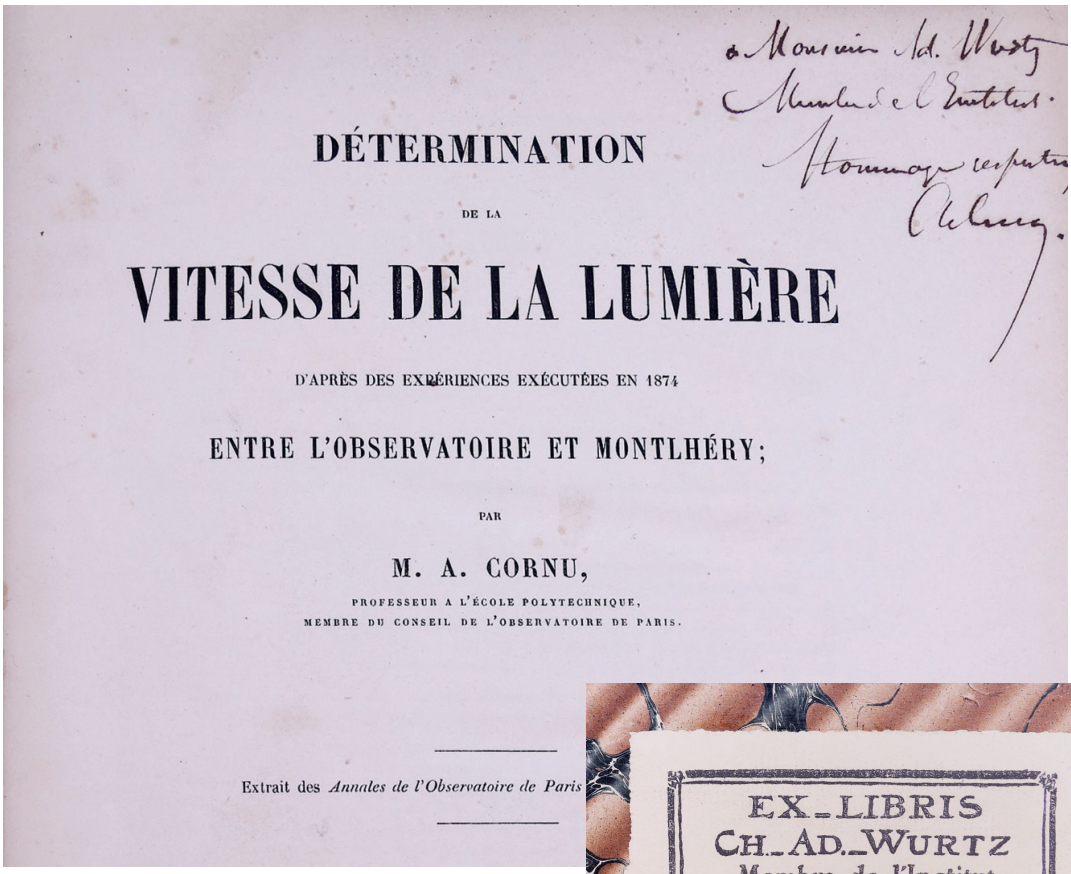
$2800

Letter of thanks regarding a private movie projection organised for the Photography Section of the Imperial Russian Technical Society.

The first public film show in Russia took place on 4/16 May 1896 in St Petersburg at the « Aquarium » summer theatre. It was directed by representatives of the Lumière brothers who had been sent to Russia for the coronation of Nicholas II. A few days later they opened the first Russian cinema at 46 Nevsky Prospect. The Cinématrographe met immediate success and other public and private screenings followed.

This letter refers to the private demonstration given to the Photography section of the Imperial Russian Technical Society (IRTS) on 29 November 1896. Interestingly, the name of the operator who was contacted by the Photography section and organised the projection, « Mr Mathieu », is not among the list of identified Lumière agents.

In the era before the revolution, the IRTS was the most important and oldest technical organisation in Russia. Founded in 1866 in St. Petersburg, it brought together scientists, engineers, and other people interested in promoting technological development. The fifth section of the IRTS was dedicated to photography. In 1896, it was presided over by Lieutenant Colonel Alexander Smirnoff, chief editor of the periodical Electritchestwo. In the report of the Jury of the 1900 International World Exhibition, he appears as the head of the electrical departement at the Imperial Court.



DÉTERMINATION

DE LA

VITESSE DE LA LUMIÈRE

D'APRÈS DES EXPÉRIENCES EXÉCUTÉES EN 1874

ENTRE L'OBSERVATOIRE ET MONTLHÉRY;

PAR

M. A. CORNU,

PROFESSEUR A L'ÉCOLE POLYTECHNIQUE,
MEMBRE DU CONSEIL DE L'OBSERVATOIRE DE PARIS.

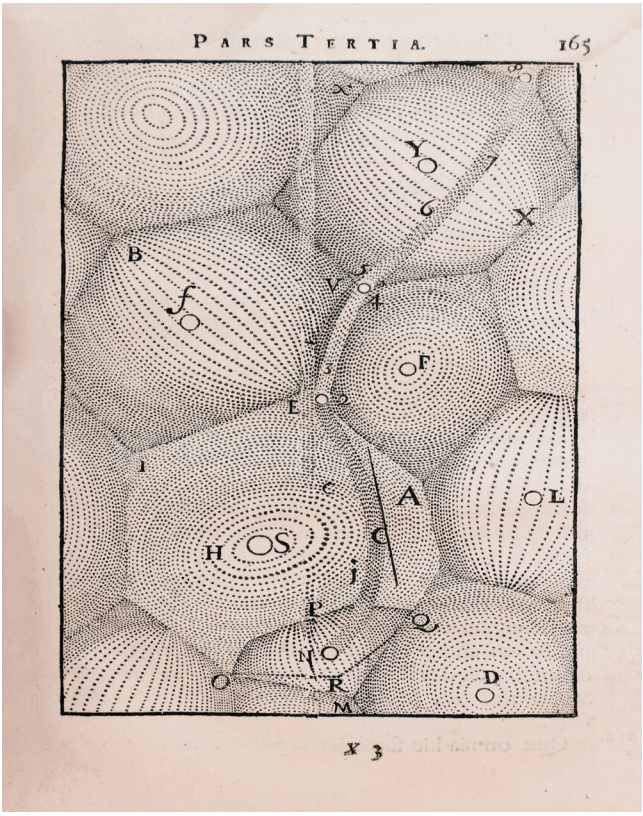
Extrait des *Annales de l'Observatoire de Paris*

The final determination of the speed of light – Copy inscribed to Adolphe Wurtz

10. CORNU (Alfred), *Détermination de la vitesse de la lumiere d'après des experiences executées en 1874 entre l'Obervatoire et Montlhery,* Paris, Gauthier-Villars, 1876.
4°, (4), 315, (1) pages and 7 folding plates ; contemporary half-goatskin.
Despite some light foxing, a good copy in its original condition.

$1300

Rare offprint from the « Annales de l'Observatoire de Paris » (Mémoires, volume XIII) ; association copy, inscribed by Cornu to the famous French chemist Adolphe Wurtz : « A Monsieur Ad. Wurtz membre de l'Institut, hommages respectueux, A. Cornu ».
In this text, Cornu determines the speed of light using Hippolyte Fizeau's method. Indeed, Cornu's works from 1872 were among the most important on the speed of light. He used and improved Fizeau's experimental method, therefore correcting the first measurements obtained by Léon Foucault in 1862.
A scarce inscribed association copy.



Bound separately at the time

11. DESCARTES (René), *Principia philosophiæ,* Amsterdam, Louis Elzevier, 1644.

4°, (22) and 310 pages ; contemporary mottled brown calf, gilt spine with raised bands, gilt roulette on edges.

Upper cap torn, with loss of leather affecting the first cover, lower cap damaged, some spotting and scuffing on boards ; first flyleaf missing, light spotting in upper margin of leaves.

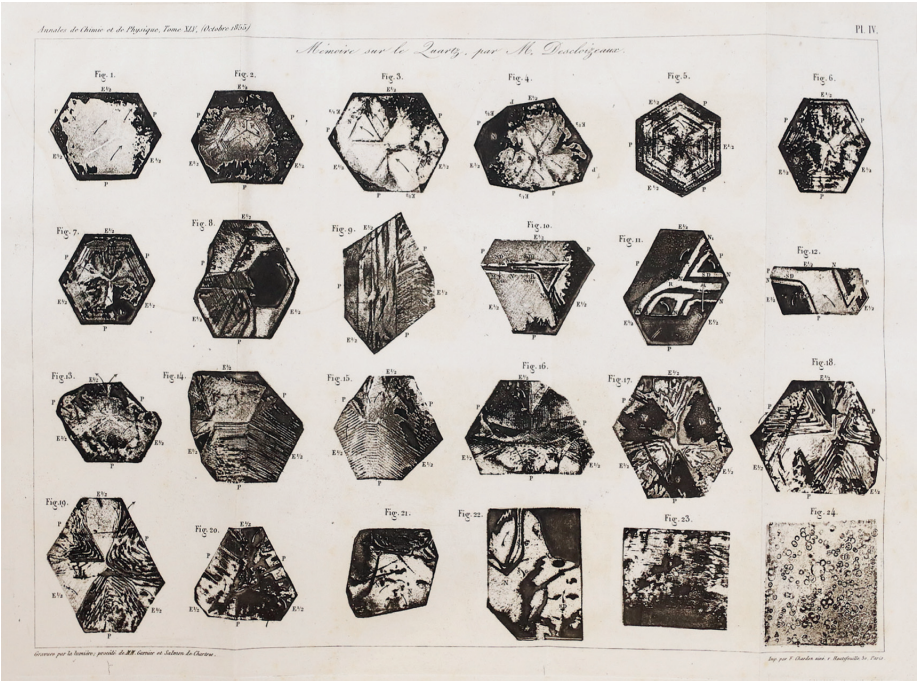
$3800

First edition of this landmark of modern philosophy.

In this book, Descartes completed *the ideas set out in the Discourse on the method* and the *Metaphysical meditations*. “This work not only represents Descartes’ most fully developed and exhaustive investigation of physics, it also provides the metaphysical underpinnings of his physical system (in Part I).” (Edawrd Slowik, “Descartes’ Physics”, The Stanford Encyclopedia of Philosophy)

“The book was an ambitious attempt by Descartes to set forth, in textbook form, an entire system of thought about the nature of matter, the nature of the mind, and the activity of God in creating and setting in motion the universe. The book is in four parts. Part I [‘The Principles of Human Knowledge’] deals with metaphysics, and such questions as cognition, the sources of human knowledge and understanding, and the relationship between a perfect, all-knowing God and human error, both intellectual and moral. Part II [‘The Principles of Material Things’] covers the general principles of physics and the theory of the laws of motion. Part III [‘Of the Visible World’] is devoted to astronomical phenomena. Part IV [‘The Earth’] concerns the properties of minerals, metals, magnets, and other natural phenomena and their apprehension by the senses.” (digital summary, Library of Congress website)

The *Principia Philosophiae* are usually bound with the *Specimina philosophiae*, which is the first Latin translation of the *Discourse on the method* and was also published by the Elzeviers in the same year. However, a few copies were bound separately at the time, like this one.

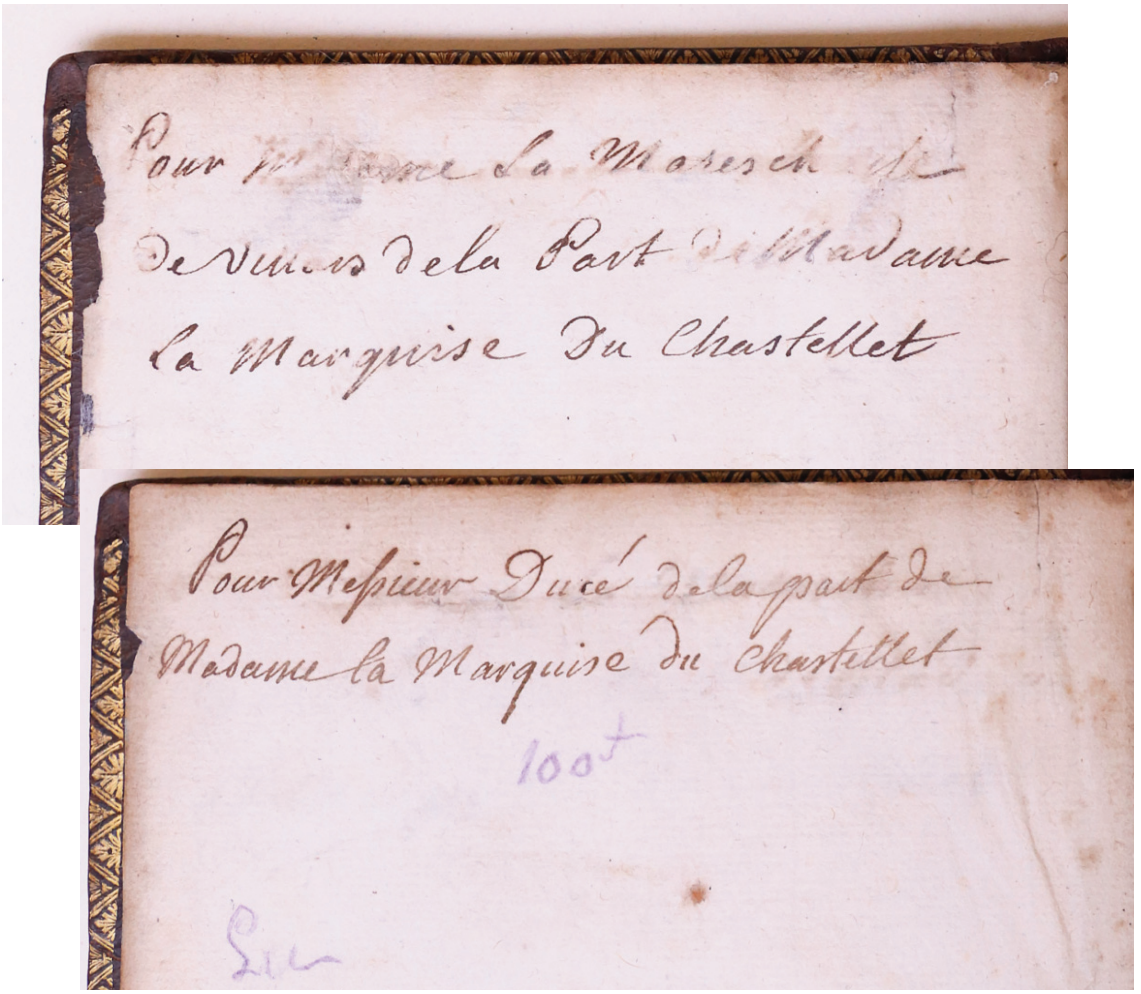


12. DES CLOIZEAUX (Alfred), GARNER (Henri) & SALMON (Alphonse), *Mémoire sur la cristallisation et la structure intérieure du quartz,* Paris, Mallet-Bachelier, 1855.
8°, (2), 188 (2) pages and 4 folding plates including a photogravure ; publisher's printed wrappers, uncut (small losses and tears to corners, rear cover stained).

$850

Rare offprint of the first edition of this important essay illustrated with an early photogravure.

A second edition was published in 1858 by the Imprimerie Impériale de Paris.
Des Cloizeaux' major crystallographic work is his thesis on quartz, which he undertook in 1853, following his examination of quartz crystals from the Valais region in Switzerland. He describes 134 new forms of quartz in addition to the 35 previously known, thanks to the use of optical crystallography. This work is an essential milestone in the classification of quartz forms and the history of photo-mechanical reproduction techniques.
Indeed, the fourth plate is a « gravure par la lumière, procédé de MM. Garnier et Salmon de Chartres ». It is a very early example of the photographic engraving process developed by Garnier and Salmon de Chartres in 1855, using photographs of crystals, in other words a proto-photogravure process. A few years later, in 1859, when they took part in the Duc de Luynes « grand concours » for the best photomechanical reproduction process, they submitted to the jury a multiple-image plate showing cross-sections of quartz.
« [Henri Garnier] developed a proprietary photographic engraving process with Alphonse Salmon, based on the light sensitivity of iron salts, which the pair discovered ; created some of the finest photogravures of his age, for which he won the grand prix for photography at the 1867 Exposition universelle and was a finalist in the Duc de Luynes competition ; and pioneered the steel-coating of copper printing plates (which he called "aciérage"), which dramatically improved their strength and durability and was widely adopted in the nineteenth century. » (Mark Katzman's website, « Art of the photogravure »)



Inscribed to a woman of the Enlightenment

13. DU CHÂTELET (Emilie Le Tonnelier de Breteuil), *Institutions de physique,* Paris, Prault fils, 1740.

8°, engraved frontispiece, (8)-450-(28) pages, 11 numbered folding plates and 22 engraved vignettes. Contemporary tan calf, gilt spine with raised bands, boards ruled with triple gilt fillet (upper hinge and headcap repaired).

$22500

Extraordinary presentation copy, bearing two different inscriptions, one to Louis Sébastien Bernin, marquis d'Ussé, the other to the Maréchale de Villars.

The verso of the front flyleaf showed a manuscript inscription reading : « Pour Messieur Ducé de la part de Madame la Marquise du Chastellet ». Surprised by the thickness of this flyleaf, we discovered that it was made of two leaves pasted together, and hid a second, earlier inscription : « Pour Madame la Maréchale de Villars de la part de Madame la Marquise du Chastellet ». We made the choice to separate the two leaves so that both inscriptions would be easily legibile.

Madame la Maréchale de Villars, aka Jeanne Angélique Roque de Varengeville (1682-1763), was an important protagonist of Madame Du Châtelet's and Voltaire's social circle.

Born into a wealthy family of diplomats, she married in 1702 one of the most senior French military officers, Marshal Claude Louis Hector de Villars (1653-1734). In 1719, she received young Voltaire at her palace of Vaux-le Vicomte. The philosopher fell desperately in love with this beautiful and bright young woman though she always rejected his advances.

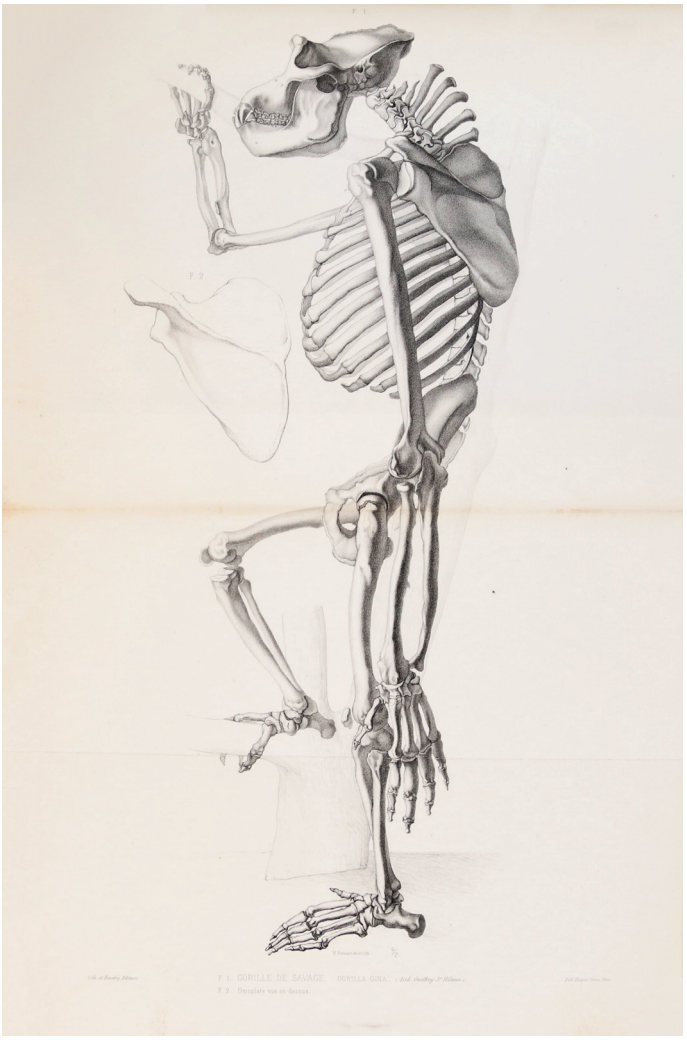
« The young Duchess de Villars was thirty years younger than her husband, who was very fond of her and very jealous. She had married him in 1701 ; she was not yet twenty whereas he was nearly fifty. She was pretty, intelligent, witty, a musician and, as a result, very popular and courted. At Vaux, her guests frequently met a young man of average height, slim, alert, witty and a poet, Voltaire. […] Voltaire was also one of Madame de Villars' admirers, and, it seems, sincerely in love with this graceful and seductive person. He wrote her some verses that have remained famous : Epître à Madame la Maréchale De Villars. » (Anatole France, *The Château de Vaux-le-Vicomte*)

The inscription to Madame de Villars was hidden underneath another inscription to « Messieur Ducé », i.e. Louis-Sébastien Bernin de Valentiné, marquis d'Ussé (1692-1772). The son of a contrôleur général de la maison du Roi and grand-son of Vauban on his mother's side, he was closely linked to the intelligentsia of the Enlightenment, among others, Madame du Deffand, President Hénault, Mademoiselle de Lespinasse, Montesquieu, Voltaire, Madame du Châtelet, who were guests at his castle of Ussé in the Loire valley. He appears in the correspondences of both Voltaire and Emilie du Châtelet. According to Richard de Lédans (1736-1816), he was passionate about poetry and music, and well-versed in science : « Le marquis d'Ussé était extrêmement répandu et très recherché par les savants et les gens du monde. Il passait pour très profond dans les sciences exactes, et cultivait les arts avec goût… » (Richard de Lédans, Manuscrit 75-C-10.1, Musée Condé, Chantilly, France). Carmontelle drew his portrait as an old man in 1760.

The two inscriptions were probably written by Madame du Châtelet's bookseller Laurent François Prault, or one of his secretaries. Indeed, on 10 December 1740, just as the I*nstitutions physiques* were finally released, she had Prault sent presentation copies of her work to a number of friends and relatives. Other known inscribed copies of the book were signed on her behalf by a secretary, like the Clairault copy kept at the Bayerische Staatsbibliothek.

One can only speculate on the hidden inscription to Madame de Villars in this copy. Had Prault already sent her the book, and had the flyleaf doubled so that this copy would not be wasted ? Or did Madame du Châtelet intend to send her a copy and eventually abstain from it ?

French Enlightenment genius Emilie du Châtelet (1706-1749) is best remembered for her translation of Newton's *Principia* into French. However, many scholars now consider that her magnus opus is her *Institutions de physique*, an important historical and highly original book : « Emilie Du Châtelet's Institutions were marginalized and trivialized as an introduction to Isaac Newton's physics to her young son. […] Today we know that Du Châtelet's work was part of a critical transformation and consolidation of post-Newtonian mechanics in the early 18th century. It served as a necessary corrective to the general rejection of Leibniz by the French scientific establishment of the period. » (see History of women philosophers and scientists online, reading guide to Du Châtelet's *Institutions de physique*, Paderborn University.)



14. DUVERNOY (Louis Georges), *Des caractères anatomiques des grands singes pseudo-anthropomorphes,* Paris, Gide et Baudry, [1855-1856].
4°, 272 pages and 16 plates ; modern paperboards (original front cover preserved).

$5500

Very rare offprint of the first complete anatomy of the gorilla and the first general comparative anatomy of the great apes.

The gorilla was discovered in 1846 and first scientifically described in 1847 by Thomas Savage and Jeffries Wyman in the *Boston Journal of Natural History*. A few years later, Richard Owen published an important paper in 1851 comparing the skulls of the orangutan, the chimpanzee and the gorilla. During the same period, in France, Blainville published two lithographed plates depicting the skeleton and skull of a gorilla in his *Ostéographie* (1849).

However, « in 1851 the Muséum d'histoire naturelle gazumped the rest of Europe in this new field of study by receiving the first two whole gorilla bodies seen in the West. Preserved in alcohol and shipped back from Gabon by Captain Penaud of the Eldorado,

these were a baby of the species (boarded as a live passenger, then embalmed in liquid after its sad demise), and a full-grown male specimen that had been secured by M. Franquet, a French naval doctor. » (Dr Ted Gott, « Stowed Away : Emmanuel Frémiet's Gorilla carrying off a woman », NGV, Art Journal, no. 45, 23 May 2014.)

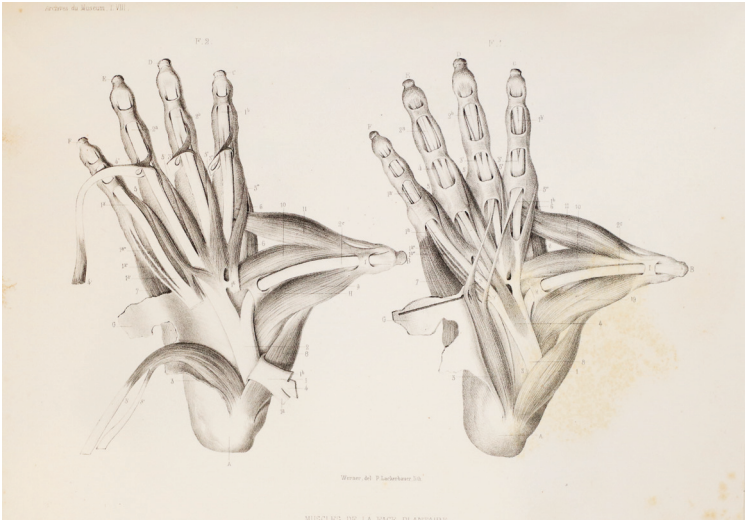
Thanks to these two exceptional specimens, Duvernoy was able to describe fully not only the general anatomy and osteology of the gorilla, but also its myology and ENT anatomy, and the anatomy of the male reproductive system. In addition, he systematically compared the gorilla's anatomy with those of the orangutan, chimpanzee and gibbon. The results of his research were first published in the paper entitled *Des caractères anatomiques des grands singes pseudo-anthropomorphes*.

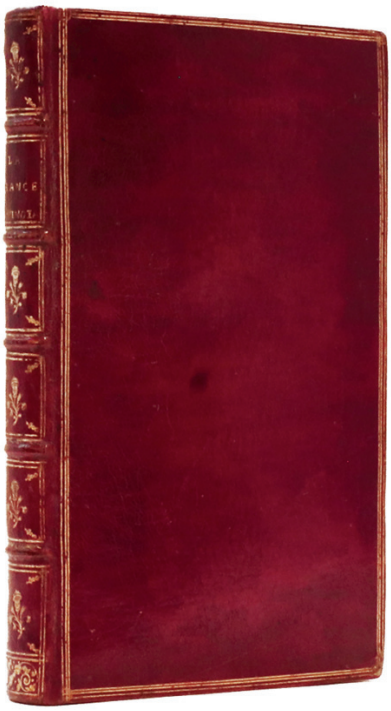
This illustration of this paper is also exceptional. The plates were engraved by Formant after his own drawings (plates 1-4 and 16), by Lackerbauer after his own photographs (plates 5-6), by Lackerbauer after drawings by Werner (plates 7-13), and by Lackerbauer after his own drawings (plates 14-15).

Henri Formant (1827–1904) entered the Muséum d'histoire naturelle in 1846 to work in the « Atelier des moulages ». He was nominated « peintre de l'atelier de moulage » in March 1849. Pierre Lackerbauer (1823-1872) was a pioneer photographer in sciences and medicine, and combined the art of lithography and photography. The Muséum painter Jacques-Christophe Werner (1798-1856) is very famous for his illustration of Levaillant and Temminck's *Birds* but also Blainville's *Ostéographie* and *Histoire naturelle des mammifères.*

This is an offprint issue and not an extract from volume VIII of the *Archives du Muséum*. It does not have a separate pagination like in most cases, because Duvernoy's paper was printed at the very beginning of volume VIII on pages 1-272. Therefore, the publisher did not have to renumber the offprint issue, which has one distinctive feature : an intermediary cover without the number and general title of the volume.

WorldCat lists only 5 copies : Muséum d'histoire naturelle (France) ; Universitätsbibliothek J. C. Senckenberg and Philosophisch-Theologische Hochschule Sankt Georgen Bibliothek (Germany) ; Cornell University Library and National Library of Medicine (USA).





The first monograph on French Guiana's natural history

15. [FRENCH GUIANA]. BARRÈRE (Pierre), *Essai sur l'histoire naturelle de la France équinoxiale ou Dénombrement des Plantes, des Animaux, & des Minéraux, qui se trouvent dans l'Isle de Cayenne, les Isles de Remire, sur les Côtes de la Mer, & dans le Continent de la Guyane,* Paris, Piget, 1741.

8°, XXIV, 216 pages, (4) leaves ; contemporary red morocco, gilt spine with raised bands, triple gilt fillet along boards, gilt edges and turn-ins (small brown stain in upper margin of first 10 leaves).

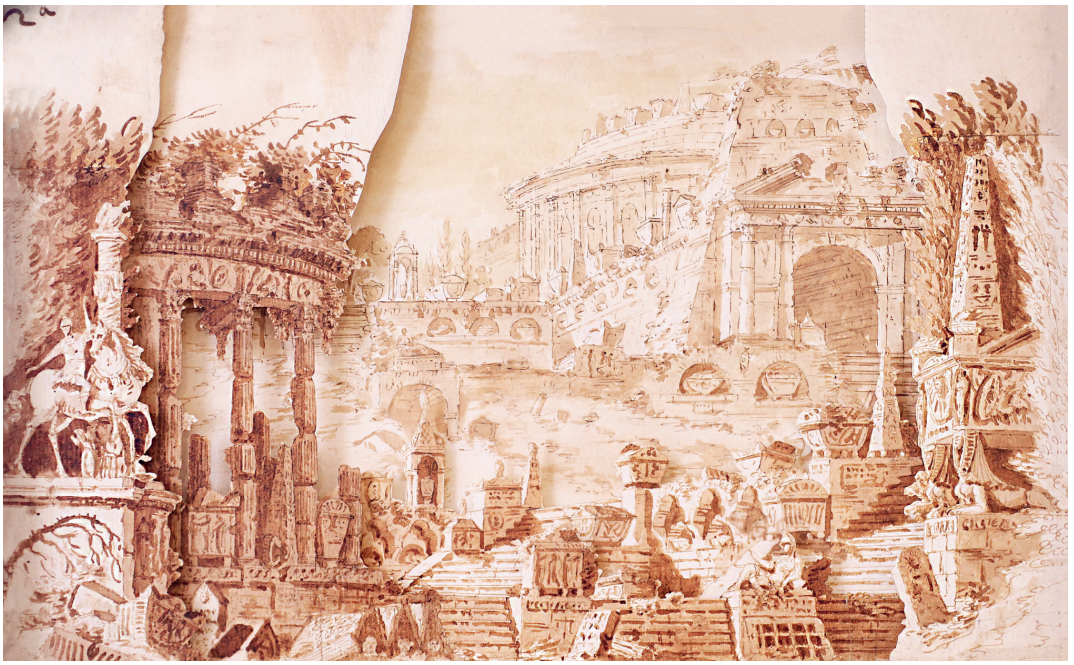
$4000

First edition ; one of the scarce large paper copies mentioned by Sabin.

Pierre Barrère (1690-1755) was a French physician and botanist from Perpignan. His thesis on the medical uses of botany attracted the attention of Antoine de Jussieu, who put forward his name to the French regent, Philippe d'Orléans. He was sent to French Guiana (« France équinoxiale ») as the King's physician and botanist in Cayenne from 1722 to 1725 to look for medecinal plants. During his stay in the colony, he collected plants, roots, fruits and seeds, as well as rocks and minerals, which were incorporated into Jussieu's herbarium. After an epidemic of yellow fever, he returned to France, where in 1741 he published this work on the natural history of Cayenne and Remire, in which he compiled a very complete alphabetical list of the plants of this part of the world - he referred to the nomenclature of Tournefort and Plumier - as well as the fauna and minerals. This book was followed by another entitled *Nouvelle Relation de la France équinoxale* in 1743.

A beautiful, large paper copy in contemporary morocco.

Sabin 3603 ; Pritzel 425 ; Leclerc 1511.



16. GOTTARDO GONZAGA (Pietro), Design for an opera set, ca 1790.
Pen and brown ink wash on 4 leaves of laid paper. Later mounting in a mid-18th-century frame. 24,5 x 40 cm. Unsigned.

$11000

Very rare series of 4 drawings for an opera set, mounted in 3 dimensions, by one of the most prolific and renowned scenographers and stage designers of the late 18th century.

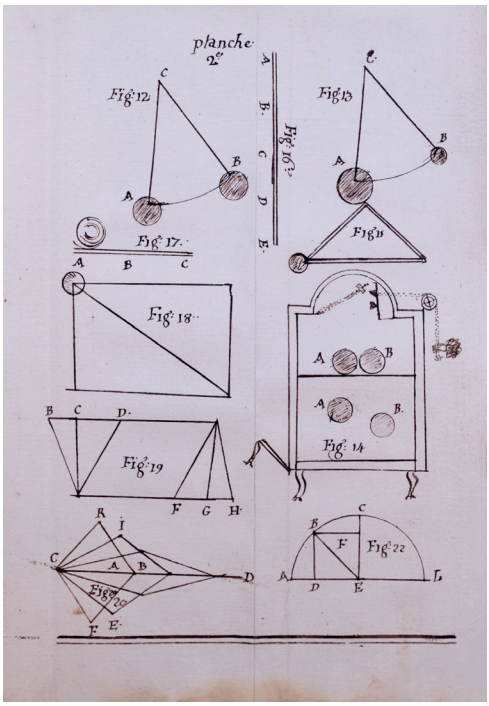
This series appears to the only known complete set design by Gottardo Gonzaga : the back-drop leaf has been preserved along with the secondary leaves. The numbering in the upper left-hand corner is certainly a mounting indication.

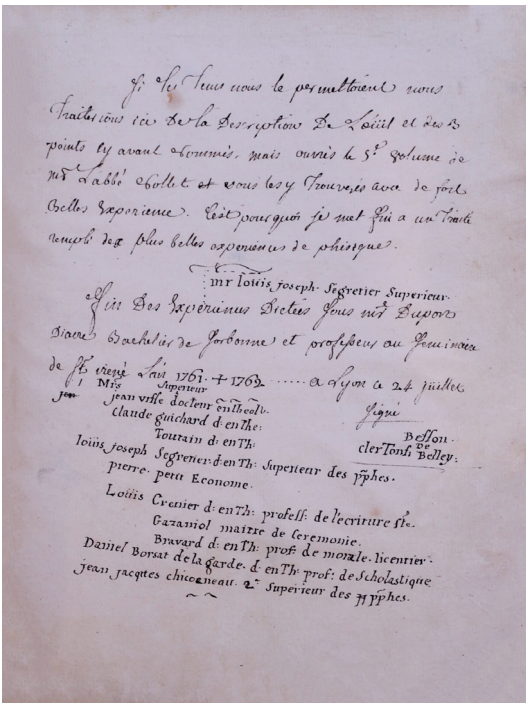
The work is typical of Pietro di Gottardo Gonzaga's style, which reached its peak at the end of the 18th century : use of pen and brown ink wash, and neoclassical architectural repertoire inspired by Piranesi. It depicts an antique cemetery scene. We have not been able to identify the opera for which this set was drawn, given Gottardo Gonzaga's large number of works.

Pietro di Gottardo Gonzaga (1751-1831) was an Italian theatre set designer who worked in Italy and, from 1792, in the Russian Empire. A vedutist, master of chiaroscuro art and trompe-l'œil optical illusions, Gonzaga was primarily known for his fantastic yet deceptively realistic stage sets. According to Ferrero, he was the first to promote scenic design into an art « in its own right ». (Mercedes Vialle Ferrero, « Stage and set », Opera on stage, Lorenzo Bianconi et al, 2002.)

Gonzaga studied in Venice and Milan as an architect under Giuseppe Moretti and Antonio Visentini, and started his career at the art firm of the Galliari family. In 1779, he debuted as solo stage designer of La Scala and stayed with this theatre until the 1792 season.

Subsequently, he produced over 60 sets in Milan, Genoa, Rome and Venice. His curtain for La Fenice became a standard copied by numerous imitators.
He went to St. Petersburg in 1792 where he painted the exterior decoration of the palace of Prince Yusupov, whom he had met in Turin. Back to Russia, Yusupov became the entertainment director of the imperial court. Thanks to his patron, Gonzaga was nominated chief designer for all performances of the Saint Petersburg state theatre and dominated the art department of imperial theatres for over 30 years. He designed plays in the Bolshoy Theatre and various court theatres, starting with illusionistic techniques and evolving from Baroque to Romanticism. In addition to designing decorations for various court festivities, including the coronations of Emperors Pavel I, Alexander I, and Nicholas I, he also constructed fireworks. Retired in 1828, he died in St. Petersburg in 1831.
Graphic works by Gonzaga are preserved at the Hermitage Museum, which holds 26 of his drawings, the National Gallery of Art and the Art Institute of Chicago.





17. [ILLUSTRATED SULPICIAN MANUSCRIPT]. HERSMULLE DUPORT (Jean), *Pars 4a P[iloso]phiae, seu Phisica* [followed by] *Cours d'expérience,* Lyon, 1761-1762.

8°, 65-(2) pages, pages 66-278, pages 281-300, pages (303)-308 (pagination gaps but text complete), 6 folded plates with drawings ; 12 pages, (1) blank page, pages 13-83, (118) pages ; contemporary brown mottled roan, gilt spine with raised bands
(caps missing, title label partly scratched, boards dampstained ; dampstain in lower margin of pages 249-264).

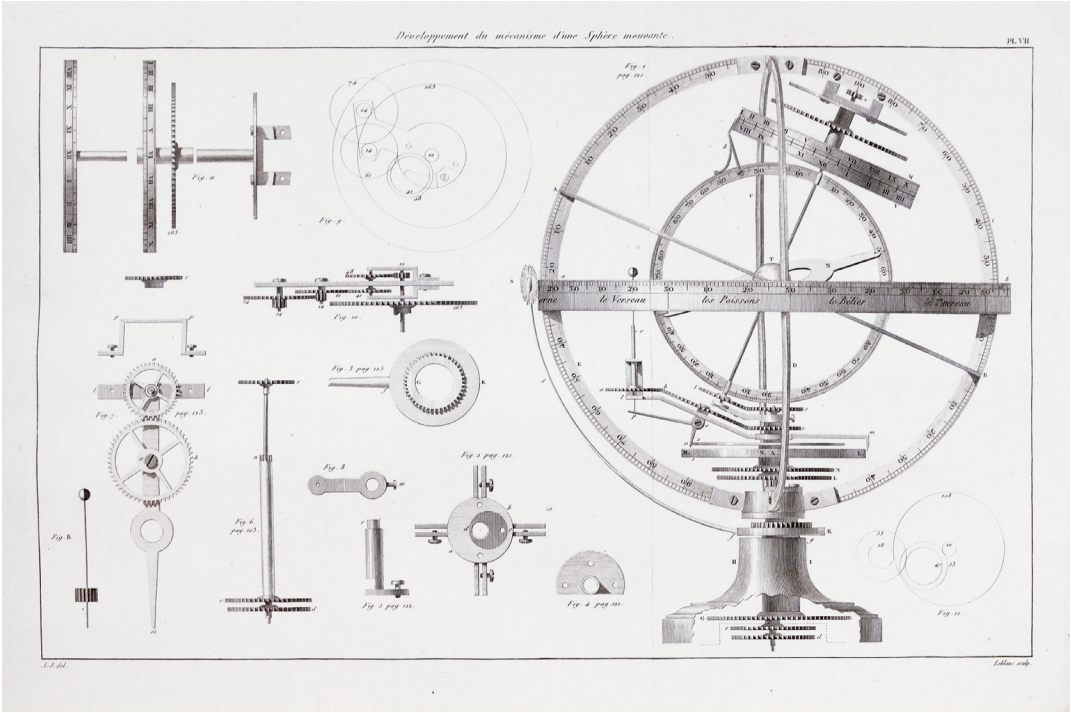
$1500

Rare illustrated manuscript course of physics and experimental physics given at the Séminaire Saint-Irénée in Lyon, in Latin and French.

It forms the fourth part of a course in general philosophy and is illustrated with more than 80 original drawings, of which 33 in the text and 50 on 6 folded plates at the end of the first part in Latin.

The manuscript ends with a final note reading : « fin des expériences dictées sous Mr Duport, diacre Bachelier de Sorbonne et professeur au seminaire de St Irénée L'an 1761 + 1762, à Lyon ce 27 juillet. » and signed : « Besson de Belley, cler[c] Tons. » (« Besson, native of Belley [Ain], tonsured cleric »). This signature is accompanied by a list of professors' names and their qualifications, in the same hand : Jean Visse, Claude Guichard, Tourain, Louis Joseph Segretier, Pierre Petit, Louis Crenier, Gazaniol, Bravard, Jean Jacques Chicorneau. The writer of the manuscript was probably the student Besson de Belley, who transcribed this course given by Jean Hersmulle Duport (mentioned in the *Almanach de la ville du Lyon et des provinces du Lyonnois* for the year 1761, p. 31).

The Saint-Irénée seminary was the first seminary established in Lyon. Founded in 1663 by Sulpicians, it trained priests mainly in philosophy, dogmatic theology and moral theology.



18. JANVIER (Antide), *Des révolutions des corps célestes par le mécanisme des rouages,* Paris, Didot l'ainé, 1812.

4°, frontispiece, XII (with half-title repeated after title page), 126, (2) pages and 8 folded plates ; contemporary marbled half-sheepskin (paper repairs to lower extremities ; inside very clean.)

$3500

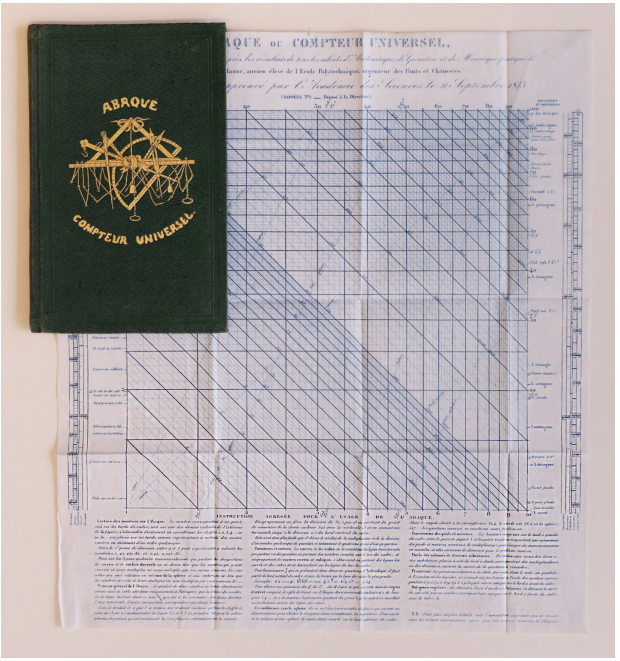
First edition, first issue, of Antide Janvier's astronomical clocks.

It does not include the appendix numbered 127-130 « contenant l'extrait d'un Rapport sur un ouvrage de M. Janvier... [d'après] le procés-verbal de la séance du lundi 19 juillet 1813 ». Therefore, it appears that the copy was strictly bound at the time, in 1812.

The mechanical culmination of astronomical horology by the genius French watchmaker Antide Janvier.

This book represents Janvier's survey of his life work on the development of clockwork driven planetary machines - the first, separately issued part of his wider project on cosmology and cosmological machines. Based on the description of an unfinished mechanism by Christian Huygens, Janvier designed an orrery showing the motions of Jupiter's satellites. This orrery is described in the present text, as well as a planisphere depicting the apparent motions of the planets in relation to the Earth, an instrument representing the revolutions of Saturn's satellites, and the most complete planetary machine ever made up to that time (the famous masterpiece of 1801).

A good copy of this important work of astronomical horology.



Printed on coated fabric

19. LALANNE (Léon), *Description et usage de l'abaque ou compteur universel qui donne à vue les résultats de tous les calculs d'arithmétique, de géométrie, de mécanique pratique, etc.,* Paris, Dubochet, 1845.

12°, 64 pages and one large folding plate ; original green printed cardboard.

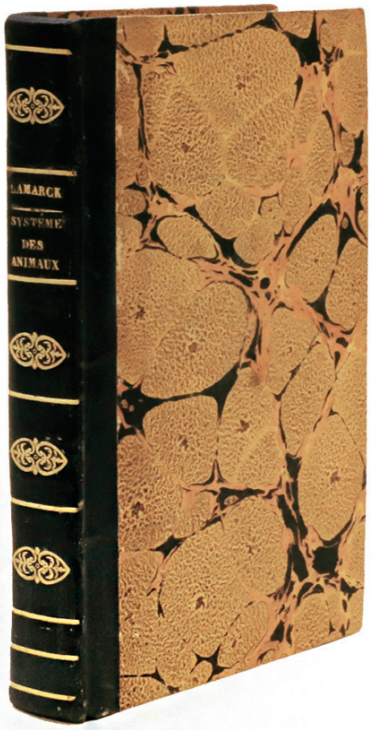
$900

Rare first edition of the first logarithmic scale, named « Abaque ou Compteur Universel » by its inventor Léon Lalanne, with the explanatory booklet.

« A graduate of France's Ecole Nationale des Ponts et Chaussées (National School of Bridges and Roads), the world's oldest civil engineering school, Léon Lalanne had a successful career managing public works in Romania, constructing railroads in Switzerland and Spain, and eventually directing his alma mater. [...] His strength in mathematics led to a number of important graphical contributions, including the very first log-log plot or logarithmic grid, a "universal calculator" [the present Abaque] that allowed one to read off the product of more than sixty functions of arithmetic, geometry, and trigonometry - essentially a one-sheet graphical slide rule. » (website of Princeton's library)

« Perhaps the most remarkable of these nomograms was Lalanne's (1844) "Universal calculator", which allowed graphic calculation of over 60 functions of arithmetic (log, square root), trigonometry (sine, cosine), geometry (area, circumference and surface of geometrical formas), conversion factors among units of measure and practical mechanics. In effect, Lalanne had combined the use of parallel, nonlinear scales such as those found on a slide-rule (angles to sine and cosine) with a log-log grid on which any three-variable multiplicative relation could be represented by straight lines. For the engineer, it replaced books containing many tables of numerical values. For statistical graphics, it anticipated ideas of scales and linearization used today to simplify otherwise complex graphical displays. » (M. Friendly, « The Golden Age of Statistical Graphics », Statistical Science, 2008, vol. 23, no. 4, p. 511.)

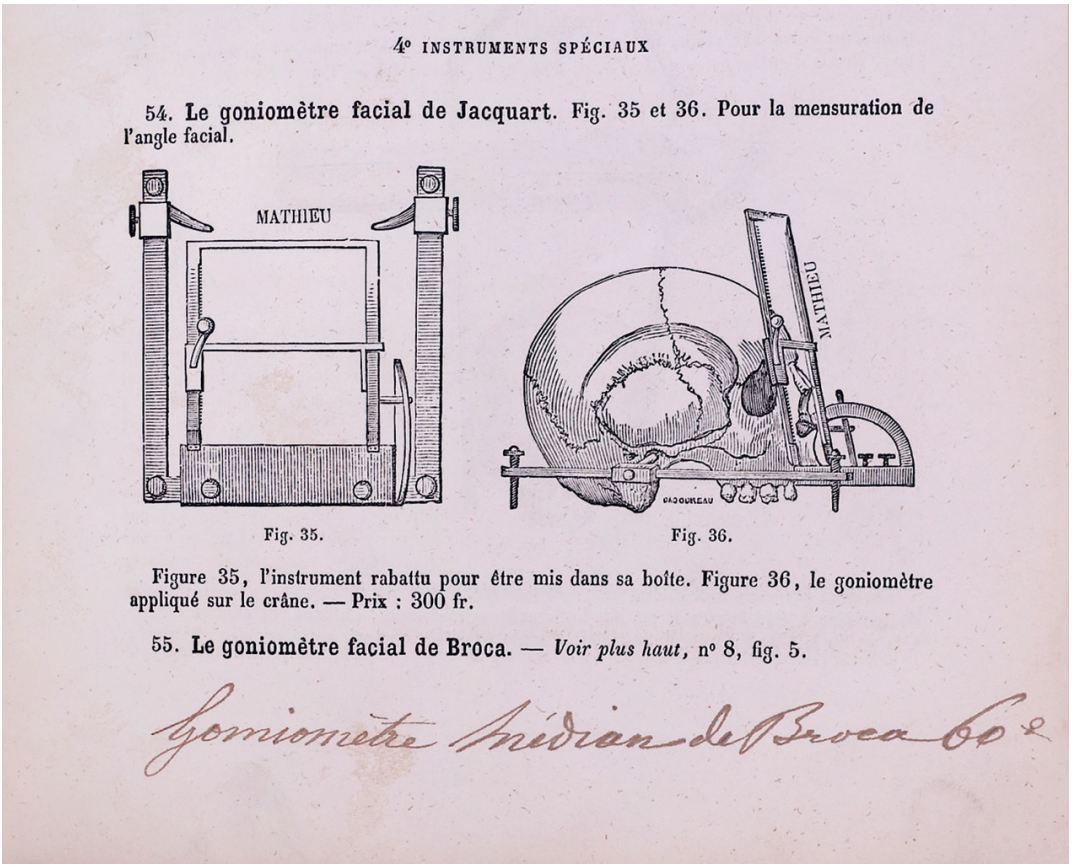
A very fine copy in its original binding.



20. LAMARCK (Jean-Baptiste de), *Systême des animaux sans vertèbres, ou tableau général des classes, des ordres et des genres de ces animaux,* Paris, chez l'auteur et Determille, An IX-1801.
8°, VIII, 432 pages and 8 tables ; contemporary half sheepskin, flat gilt spine (small light marginal dampstain to first quarter of text).

$4000

An attractive copy of the first edition.
« Lamarck's first public presentation of his theory of evolution was in his opening discourse for his course on invertebrates at the museum in 1800 ; it was published the following year at the beginning of his *Systême des animaux sans vertèbres.* » (DSB)
Ineed, Lamarck writes on page 15 of his opening discourse : « Je pourrais prouver que ce n'est point la forme soit du corps, soit de ses parties qui donne lieu aux habitudes, à la manière de vivre des animaux ; mais que ce sont au contraire les habitudes, la manière de vivre et toutes les circonstances influentes qui ont, avec le temps, constitué la forme du corps et des parties des animaux. Avec de nouvelles formes, de nouvelles facultés ont été acquises, et, peu à peu, la nature est parvenue à l'état où nous la voyons actuellement ».
In this work, Lamarck also systematised the study of invertebrates, generalised the use of the word (« invertebrate ») and created a new classification system based on Cuvier's work on comparative anatomy. « He separated spiders and crustaceans from insects, and classified worms into truer categories than had Linnaeus » (Dibner, 194).
A fine and clean copy of this doubly important text, without leaf 402 bis entitled « Seconde addition » present in some copies.
Rare in this condition.



21. MATHIEU (Louis), *Catalogue des instruments anthropologiques,* Paris, Plon, 1873. Large 8°, 31, (1) pages ; publisher's printed wrappers (a few minor losses of paper to covers).

$750

Rare and unique edition of one of the very first catalogues of medical instruments devoted exclusively to anthropology and craniometry.

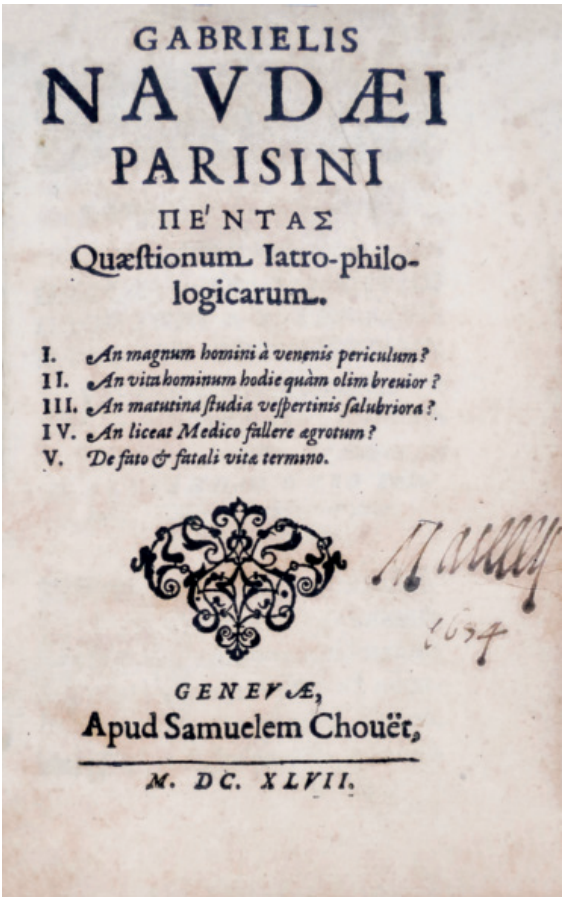
Louis Mathieu (1817-1879) was born in Belgrade Namur, near Gembloux, a Belgian cutlery center where he made his apprenticeship. After a complementary formation with Parisian surgical cutlers Charrière and Lüer, he established his personal firm in 1847 in Paris, the medical cutlery's capital. A very gifted technician and an excellent businessman, he built an important and prestigious firm of medical instrumentation. Along with Charrière and Lüer, he was one of the most inventive and prolific French surgical instrument makers of the 19th century.

This catalogue is divided into 3 parts : anthropology, craniometry and osteometry. It describes 92 different instruments and is illustrated with 47 woodcuts.

Stamp of the Lüer/Wulfing-Lüer collection on the title page. A few manuscript annotations and corrections in the text.

22. NAUDÉ (Gabriel), *Πεντας quæstionum iatro-philologicarum,* Geneva, Samuel Chouët, 1647.
12°, (8), 332, and (4) pages ; contemporary limp vellum, ink title on spine (some minor losses of vellum on spine, paper foxed).

$1200


GABRIELIS
NAVDÆI
PARISINI
ΠΕΝΤΑΣ
Quæstionum Iatro-philologicarum.

I. An magnum homini à venenis periculum?
II. An vita hominum hodie quàm olim breuior?
III. An matutina studia vespertinis salubriora?
IV. An liceat Medico fallere ægrotum?
V. De fato & fatali vitæ termino.

GENEVÆ,
Apud Samuelem Chouët,
M. DC. XLVII.

Rare first collective edition of these essays in the philosophy of medicine.
Seldom studied in Naudé's work, this collection of five epistemological texts recalls the importance of his medical training, which considerably permeates his naturalist and materialist thought. These essays had been published separately before, but the individual editions are extremely rare : the first appeared in Rome in 1632 ; the second, in Cesena in 1634 ; the third, in Padua the same year ; the fourth, in 1635 ; and the fifth, in Leiden the same year.
"In his *Quaestiones iatrophilologicae* (1632-1639), Gabriel Naudé proposes five different questions, but the central topic is the relationship between life and death, tackled in a materialistic and areligious perspective. Naudé deals with the subject of suicide and euthanasia in the context of a reflection on the end of life and determinism, analysed in the last question. Suicide and good death are presented as paradigmatic examples of free choice that nullify any belief in a predetermined fate." (Anna Lisa Schino, "Buona morte e suicidio nelle riflessioni di un libertino erudite", *Bruniana e campanelliana : ricerche filosofiche e materiali storico-testuali,* XXV, 2, 2019, pp. 493-504).
Gabriel Naudé (1600-1653) was a French physician and librarian. He is considered the first important theoretician of modern library organisation. After studying medicine at Paris and Padua, he was called to Rome in 1629 as librarian to Cardinal Bagni and later Cardinal Barberini. He had occasion to expose a falsely attributed book for Cardinal Richelieu, who then called him to Paris as his own librarian, and got him the honorary title of physician to King Louis XIII. He became librarian to Cardinal Mazarin in 1643, when the latter succeeded Richelieu as first minister of France. For Mazarin he collected some 40,000 books from all over Europe to constitute the Bibliothèque Mazarine, widely acclaimed as the best library of the period. The Bibliothèque Mazarine was dispersed during the uprisings of the Fronde (1648–53), and Naudé was exiled to Sweden. He died en route to Stockholm. (Britannica)

23. [NEW ZEALAND]. CRANWELL (Thomas), *New Zealand Ferns,* Auckland (Parnell, New Zealand), n. d. [ca 1870].

Publisher's original binding, spine covered in blind-tooled green morocco, boards made of kauri wood, bevelled and decorated with carved frames, title carved in a central medallion in the first board.

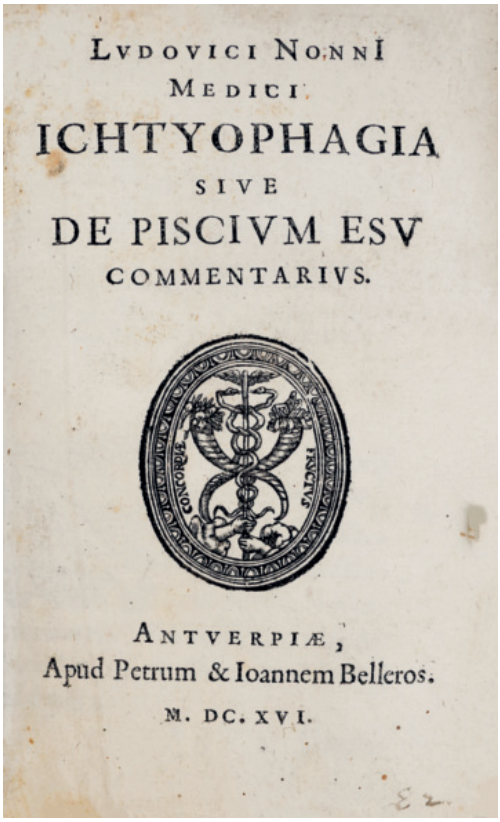
Printed label of Thomas Cranwell pasted to the first flyleaf. A few small cracks in the boards ; minor losses to 6 of the specimens.

$2500

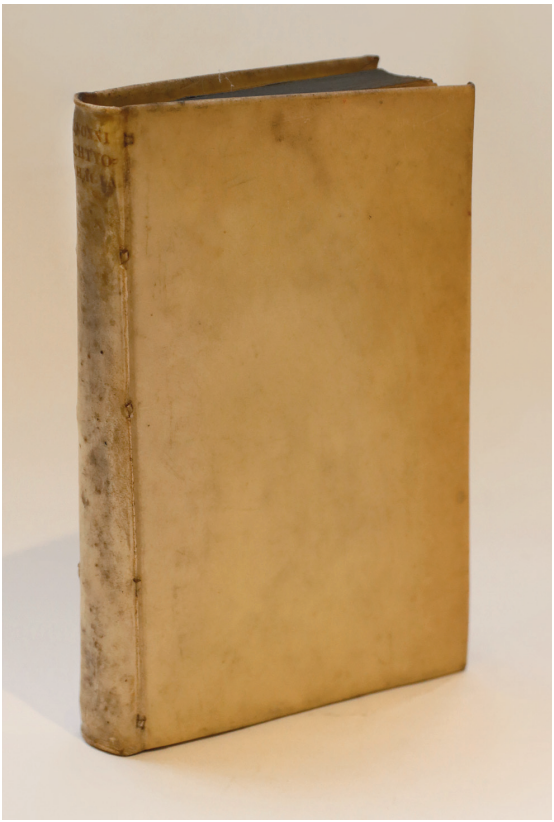
Fine album of New Zealand ferns prepared and mounted by Thomas Cranwell, one of the 3 major 19th-century herbarium makers of this symbolic New Zealand plant.

It contains 30 different species of ferns captioned in Latin. The publisher's binding, with its carved wooden boards, was probably made by the Viennese cabinetmaker Anton Seuffert, who who emigrated to New Zealand in 1859 and collaborated with Cranwell. The Te Papa Tongarewa Museum in Wellington keeps several different examples of fern albums made by Cranwell between 1870 and 1878, featuring boards made from kauri wood (a native species of conifer tree), one of which is identical to ours.

The silver fern became the symbol of New Zealand at the beginning of British colonisation in the 1840s.


LVDOVICI NONNI
MEDICI
ICHTYOPHAGIA
SIVE
DE PISCIVM ESV
COMMENTARIVS.

ANTVERPIÆ,
Apud Petrum & Ioannem Belleros.
M. DC. XVI.



By the founder of medical dietetics

24. NONNIUS (Ludovicus), *Ichtyophagia sive De Piscium esu commentarius,* Antwerp, Petrus and Johannes Belleros, 1616.

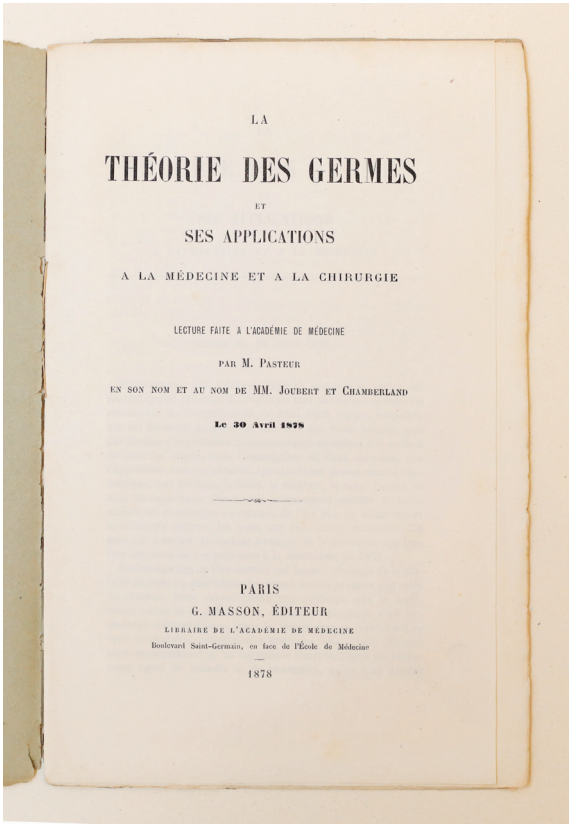
Small 8°, (16), 176, (16) pages ; contemporary stiff vellum.

$3600

First edition of the first dietary and gastronomic treatise on the consumption of fish. Nonnius aims at demonstrating the health benefits of eating fish, as well as its nutritional and gastronomic value. He describes 37 types of fish, their characteristics, habitat, virtues and preparation, with numerous quotations from ancient and modern authors. A short multilingual glossary follows the notice to the reader.

"Ludovicus Nonnius was born in Antwerp in 1553 ; he obtained his medical degree in about 1577 in Louvain and settled down in his native town. He built up an important practice and became in 1620 a cofounder of the first medical society in the Southern Netherlands, the 'Collegium Medicum Antverpiense'. As physician, naturalist, writer, latin poet, numismatist and connaisseur of the Greek and Latin authors, this man is a good example of a Renaissance humanist. He died in 1645 at the age of 92. Numerous data point to his friendship with Rubens. […] He was the first to systematically study foods from a medical and hygienic point of view. […] The first of Nonnius› books on dietetics, 'Ichthyophagia', describes 37 species of noble fish. He asserts that eating fish is very healthy." (Jean-Pierre Tricot, "Ludovicus Nonnius (1553-1645), Marrano physician in Antwerp, author of the 'Diaeteticon'", Verh K Acad Geneeskd Belg., 1996, pp. 251-269).

A fine copy in contemporary vellum.



LA

THÉORIE DES GERMES

ET

SES APPLICATIONS

A LA MÉDECINE ET A LA CHIRURGIE

LECTURE FAITE A L'ACADÉMIE DE MÉDECINE

PAR M. PASTEUR

EN SON NOM ET AU NOM DE MM. JOUBERT ET CHAMBERLAND

Le 30 Avril 1878

PARIS

G. MASSON, ÉDITEUR

LIBRAIRE DE L'ACADÉMIE DE MÉDECINE

Boulevard Saint-Germain, en face de l'École de Médecine

1878

A key work in the history of bacteriology and asepsis

25. PASTEUR (Louis) & CHAMBERLAND (Charles), *La Théorie des germes et ses applications à la médecine et à la chirurgie,* Paris, G. Masson, 1878.

8°, 23, (1) pages ; original wrappers (spine fragile with small losses of paper).

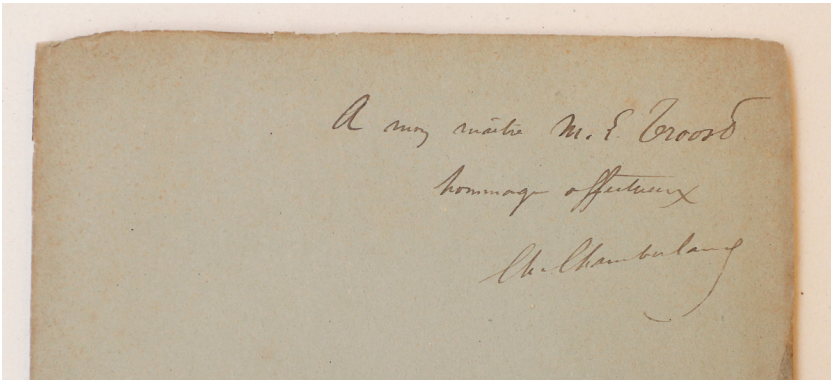
$1300

Rare offprint inscribed by Chamberland to the French chemist Louis Joseph Troost : « A mon maître M. L. Troost. hommage affectueux. Ch. Chamberland ».

« In this speech Pasteur first introduced the term germ theory and defined its applications in medicine, surgery, and infectious disease. The speech was first published in condensed form in *Comptes rendus… de l'Académie des Sciences*, 86 (1878) 1037-1043. For that version authorship was expressed as Pasteur, Joubert et Chamberland. » (G&M 14194).

« In this important lecture to Paris' Académie de Médecine, Pasteur presented some early and key concepts of bacteriology which were instrumental in the evolution of asepsis. Pasteur discussed the existence of anaerobic and aerobic organisms, defined what later proved to be bacterial toxins, differentiated between virulent and avirulent bacteria, considered specificity of bacteria, superinfection, interference, as well as bacterial antagonism and protagonism. In addition, he stressed the importance of the role of germs in infections and emphasized the need for proper antiseptic and sterilization procedures in order to avoid the chance of infection. » (Heirs of Hippocrates 1899).

In original condition.



26. [PHRENOLOGY]. DEJORT (Henri), *Petit buste phrénologique,* France, ca 1870. Plaster. 25x13x10cm. Dejort's printed signature at the base of the neck.

sold

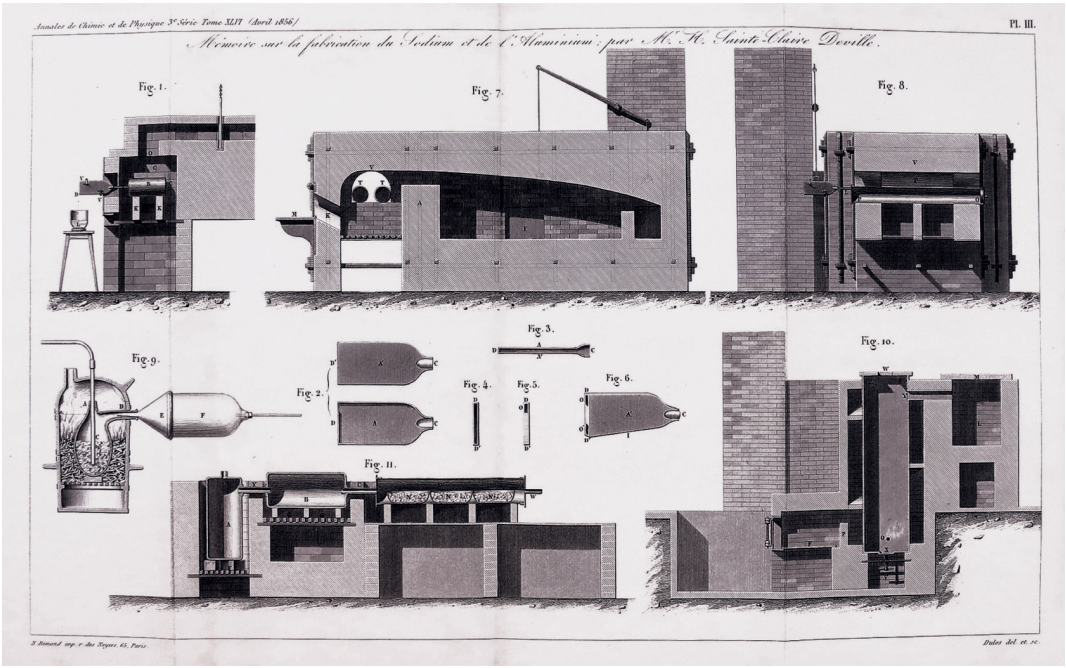
One of the latest and rarest avatars of the phrenological heads.

This head was designed by Henri Dejort, a mad scientist with no medical or scientific background as we learn in his *Deux lettres sur la doctrine de Gall, adressées à l'un des membres de l'Institut* (Rennes, 1870). In this pamphlet, he explains that his aim is to defend and rehabilitate Gall's phrenology on the basis of new physiological and psychological discoveries on the cerebellum.

Gall's theories were developed at the end of the 18th century. Although they met brief success at the beginning of the 19th century, by the 1830s most doctors had turned away from this medical philosophy. Furthermore, the considerable progress in neurology from the 1840s definitively undermined the theories of Gall and Spurzheim. Therefore, Dejort's developments came out quite late.

At the end of the above-mentioned publication, Dejort advertises his small phrenological bust, offered for sale at the price of 10 francs. It seems that almost no example survived.

Some dust, cracks and small losses, nonetheless, an attractive, unsophisticated example.



27. SAINTE-CLAIRE DEVILLE (Henri), *Mémoire sur la fabrication du sodium et de l'aluminium,* Paris, Mallet-Bachelier, [1856].
8°, 44 pages and one folding plate ; unbound copy, without wrappers, as published.

$1300

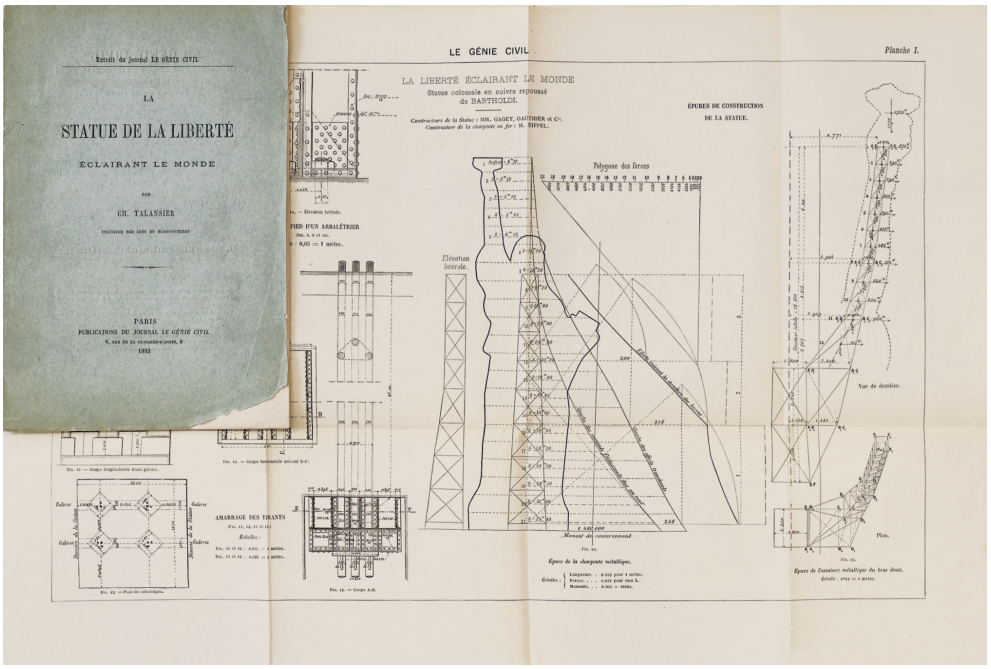
Rare offprint issue of Sainte-Claire Deville's final publication about the discovery of aluminum, proving its safety and inalterability, and about the industrial production at low cost of this new metal.

In 1854, the chemist Henri Sainte-Claire Deville (1818- 881) obtained for the first time pure aluminum globules by a process of reduction of double aluminum chloride by sodium. Supported financially by the Emperor Napoleon III, he began to produce aluminum in Paris in 1856 (see this paper) and then in Salindres (Gard) in 1860.

« Sainte-Claire Deville's research culminated in the winter of 1853-1854 and he made his first communication to the Paris Academy of Sciences in its session of 6 February 1854. In March 1854, for the first time in the world, an aluminum blade was presented to the public. In his cover letter to the Academy, the scientist specified that tests had been carried out on the metal for three months. » (Bernadette Bensaude-Vincent, *Between Nature And Society : Biographies Of Materials*, 2022, p. 81.)

But some doubt remained about the safety and inalterability of this new metal. Therefore, Saint-Claire Deville, with the support of the French government, pursued his research at the Javel laboratory and gave his final conclusions in the present paper published in 1856 : « Je ne doute pas, en effet, aujourd'hui que l'aluminium ne devienne tôt ou tard un métal usuel. […] Bien plus, son inaltérabilité et son innocuité parfaites ont pu être expérimentées, et l'aluminium a subi ces épreuves mieux encore que je ne pouvais le prévoir. Son innocuité absolue en permettra l'emploi dans une foule de cas où l'étain présente des inconvénients à cause de la facilité extrême avec laquelle ce métal est dissous par les acides organiques.» (pp. 1-2).

Sainte Claire Deville's conclusions proved right. Gradually, aluminum would become extensively used in industry and everyday life.



First illustrated description of the construction of the Statue of Liberty

28. [STATUE OF LIBERTY]. TALANSIER (Charles), *La Statue de la Liberté éclairant le monde,* Paris, « Le Génie civil », [August] 1883.

8°, 35, (1) pages, in-text illustrations and diagrams, including frontispiece, 2 mid-page figures and one full-page figure, and 2 large folding plates. Publisher's printed wrappers. (spine slightly damaged, loss at lower right-hand corner of front cover).

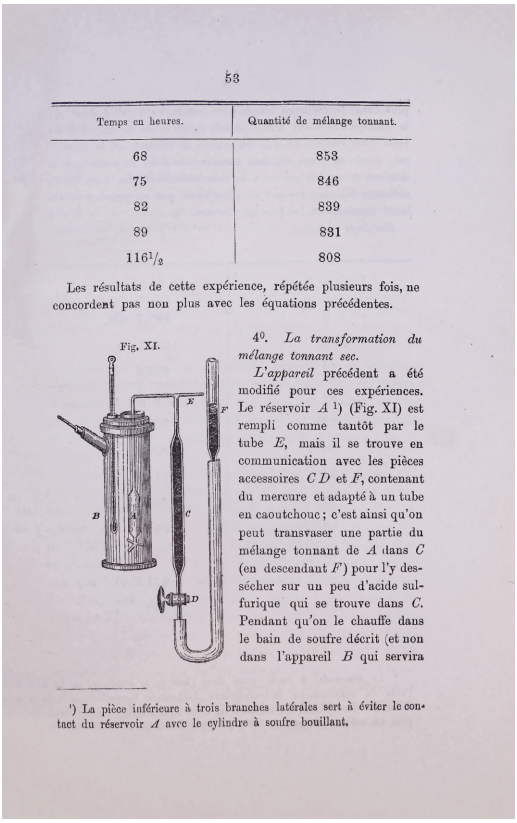
$8500

Scarce offprint from the periodical « Le Génie civil », and first separately published technical description of the construction of the Statue of Liberty.

Conceived as a monumental pylon, the metal framework of the statue, designed by Gustave Eiffel, was a technical forerunner of the Eiffel Tower.

« Inspired by the statue of Saint Charles Borromeo on the shores of Lake Maggiore, Bartholdi decided from the outset to use an embossed copper shell with an inner iron frame. [...] Following the death of Viollet-le-Duc, who had designed the first iron framework, Eiffel succeeded him and proposed an entirely different structure, designed to withstand the wind and the expansion of the metal. The core of the framework is formed by a sort of pylon, with four attachment points to the masonry base that supports the statue. The envelope is connected to the pylon by flat iron reinforcements placed on the inner surface of the copper plates. These reinforcements form a real trellis resting directly on the framework. [...] Dismembered into more than three hundred pieces, the Statue was shipped to New York in 1885 and inaugurated in 1886 ». (Sylvie Deswarte & Raymond Guidot, *Histoire de la Statue de la liberté*, Centre de création industrielle du Centre Pompidou, listing Talansier's publication as the first in the bibliography).

In addition to a few copies in the French libraries, WorldCat lists only one copy in the UK (Victoria and Albert Museum) and 3 copies in the USA (California State Library, NY Public Library and Redwood Library & Athenaeum).



53

Temps en heures.	Quantité de mélange tonnant.
68	853
75	846
82	839
89	831
$116^1/_2$	808

Les résultats de cette expérience, répétée plusieurs fois, ne concordent pas non plus avec les équations précédentes.

Fig. XI.

4°. *La transformation du mélange tonnant sec.*

L'appareil précédent a été modifié pour ces expériences. Le réservoir *A* [1]) (Fig. XI) est rempli comme tantôt par le tube *E*, mais il se trouve en communication avec les pièces accessoires *C D* et *F*, contenant du mercure et adapté à un tube en caoutchouc; c'est ainsi qu'on peut transvaser une partie du mélange tonnant de *A* dans *C* (en descendant *F*) pour l'y dessécher sur un peu d'acide sulfurique qui se trouve dans *C*. Pendant qu'on le chauffe dans le bain de soufre décrit (et non dans l'appareil *B* qui servira

[1]) La pièce inférieure à trois branches latérales sert à éviter le contact du réservoir *A* avec le cylindre à soufre bouillant.

The foundation of physical chemistry

29. VAN 'T HOFF (Jacobus Henricus), *Etudes de dynamique chimique,* Amsterdam, Frederik Müller & C°, 1884.

Large 8°, (4), IV, 215, (1) pages ; contemporary half goatskin, spine with raised bands.

$1500

First edition of this landmark in the history of chemistry, for which Van 't Hoff was granted the Nobel Prize in 1901.

"In 1884 his book *Études de dynamique chimique* (Studies in dynamic chemistry) appeared, in which he entered for the first time the field of physical chemistry. Of great importance was his development of the general thermodynamic relationship between the heat of conversion and the displacement of the equilibrium as a result of temperature variation. At constant volume, the equilibrium in a system will tend to shift in such a direction as to oppose the temperature change which is imposed upon the system. Thus, lowering the temperature results in heat development while increasing the temperature results in heat absorption. This principle of mobile equilibrium was subsequently (1885) put in a general form by Le Chatelier, who extended the principle to include compensation, by change of volume, for imposed pressure changes – it is now known as the van 't Hoff-Le Chatelier principle." (Jacobus H. van 't Hoff – Biographical. NobelPrize.org).

"In 1884 he published the innovative book *Études de dynamique chimique*, in which he used the principles of thermodynamics to provide a mathematical model for the rates of chemical reactions based on the changes in the concentration of reactants with time. In the *Études*, van 't Hoff showed how the previously independently developed concepts of dynamic equilibrium (that chemical equilibrium results when the rates of forward and reverse reactions are equal), the law of mass action (that the concentration of substances affects the rate of reaction), and the equilibrium constant (the ratio of the concentrations of starting materials to products at equilibrium) together formed a coherent model for understanding the nature of chemical reactions. Finally, he showed mathematically how temperature, pressure, and mass affected the rate of chemical reactions and how the heat generated by a reaction could be calculated from the mathematical equation governing the final equilibrium state. This relationship between heats of reaction and equilibrium allowed van't Hoff to define chemical 'affinity', an old concept in the history of chemistry that had been difficult to define in terms of its effects, specifically the amount of work that a reversible chemical reaction could perform." (Britannica)

Artington IV, pp. 658-60 ; Norman 2129.

By the maker of the first map of Munich

30. VOLCKMER (Tobias), Astronomical compendium in gilt and silver brass and silver signed «Tobias Volckmer fecit anno 1641».
Gilded brass and silver. The instrument measures 95x95x30mm closed.

$35000

A beautiful instrument typical of the Volckmers' production.
The compendium is composed of a geometric astronomical quadrant with movable alidade decorated with fruits and mascarons, a horizontal sundial set for 48° North latitude – i.e. that of Munich where Volckmer was based -, a large rotating compass with a wind rose, two sides without engraving, and a sinical quadrant with alidade.
This compendium is typical of the production of Volckmer the Elder and Volckmer the Younger :
- large square form and thickness ;
- decoration with fruits and mascarons ;
- engravings of two exterior plates : one combining astronomical and surveying quadrants, and another with a large sinical quadrant.

In addition, the quadrants are engraved, in a typical Volckmer manner, with small parallel-hatched squares making visible the division every 5°.
Close examples of Volckmer's compendiums are kept at the British Museum, London (Volckmer the Elder, 1588), the Museum of the History of Science, Oxford (Volckmer the

Elder, 1584), and the Whipple Museum, Cambridge (Volckmer the Younger, 1645 – very similar to ours).

The Volckmers, Father and Son, were the most important instrument makers in Bavaria during the 1590s-1650s.

Tobias Volckmer the Elder was a Brunswick-born goldsmith and an instrument maker who was first recorded in the Salzburg archives in 1586. In 1594 he was appointed as mathematician and goldsmith to the court of the Dukes of Bavaria in Munich.

Trained by his father, Tobias the Younger (1586-1659) appeared as a surveyor on the payroll of the Bavarian court from 1613 onwards, with a salary of 13 guilders 30 kreuzer. On 11 October 1613 he was accepted into William V's court service with an annual salary of 50 guilders.

In 1616 he and his father took part in surveying preparatory work for the planned brine pipeline from Reichenhall to Traunstein. On 9 October 1617 Tobias the Younger was accepted into the Munich goldsmiths' guild. The same year, he published his book on surveying at Augsburg under the title *Tabulae proportionum angulorum geometriae*. He is also known for the first printed map of the city of Munich, which he drew on the basis of his own measurements, etched and published in 1613.

A fine German instrument by an important maker from a renowned family of Bavarian mathematicians, engravers and goldsmiths.


TOBIAS VOLCK MDL