

RICHARD C.RAMER Old and Rare Books

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June 16, 2025

Special List 542 Mathematics

Items marked with an asterisk (*) will be shipped from Lisbon.

SATISFACTION GUARANTEED: All items are understood to be on approval, and may be returned within a reasonable time for any reason whatsoever.

VISITORS BY APPOINTMENT



Special List 542 Mathematics

*1. ALMEIDA, A.[ntónio] A.[ugusto] Marques de. *Aritmética como descrição do real (1519-1679): contributos para a formação da mentalidade moderna em Portugal.* 2 volumes. Lisbon: Comissão Nacional para as Comemorações dos Descobrimentos Portugueses / Imprensa Nacional, 1994. Mare Liberum. Large 8°, original illustrated wrappers. As new. 325 pp., (11.); 451 pp., (11.). One of 800 copies. ISBN: 972-27-0523-7. 2 volumes. \$90.00

FIRST and ONLY EDITION of this authoritative work, with an extensive bibliography, indexes of authors, places, and subjects, and a preface by Joaquim Veríssimo Serrão.

Rebirth of the Study of Mathematics and Engineering in Portugal and the Reflection of this Movement in Brazil: Second Book on Military Engineering Written in Brazil and Second Such Book Written by a Brazilian, Dedicated to Gomes Freire de Andrade—With 20 Folding Engraved Plates

2. ALPOIM, José Fernandes Pinto de. *Exame de bombeiros, que comprehende dez tratados ...* Madrid: En la Officina de Francisco Martinez Abad, 1748. 4°, contemporary sheep (chafed, upper joint cracking), spine gilt with raised bands in five compartments (upper compartment defective), crimson leather lettering piece in second compartment from head (slightly defective), text-block edges sprinkled. Title page in red and black. Engraved allegorical vignette on f. *3r. Engraved portrait of Gomes Freire de Andrade laid in: trimmed, with small piece missing from frame at lower edge, and with traces of glue on verso. Plate XVI somewhat browned, plate XVIII dampstained. In good condition. Lithograph bookplate: "EMMANVEL" in a circle around a five-pointed star. Engraved portrait, (20 II.), 444 pp. [i.e., 442; pagination skips from 372 to 375], 20 folding engraved plates and 1 folding table. \$4,000.00

FIRST and ONLY EDITION. This work and Alpoim's *Exame de artilheiros*, Lisbon 1744, are "proofs of the rebirth of the study of mathematics and engineering in Portugal and the reflection of this movement in Brazil, and they symbolize a Luso-Brazilian contribution to this movement. They are, in short, the first two books on military engineering written in Brazil and the first two 'textbooks' of this kind by a Brazilian author" (Borba de Moraes I, 26).

The *Exame de bombeiros* is a comprehensive textbook on military bombardment. Written in dialogue form, the *Exame* first covers the mathematics necessary for plotting trajectories, proceeds to a long discussion of mortars and how to use them most effectively, describes more recent inventions such as the howitzer and the petard, and closes with a long treatise on the many types of incendiary shells and their proper use. The text is enhanced with frequent references to the contributions of other military engineers,



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including Galileo and Vauban, and historical notes on how bombardment had contributed to the success or failure of various military campaigns. The plates depict mortars, projectiles, and incendiary shells, many shown in cross section.

Borba de Moraes devotes three pages to unraveling the "veritable bibliographic puzzle" of the printing of this work, and to dispelling the myth that it and/or Alpoim's *Exame de artilheiros* were printed in Rio de Janeiro by Antonio Isidoro da Fonseca in 1747—a theory first suggested by Varnhagen. Since the *Exame de artilheiros* was banned by a decree of 15 July 1744 (for not adhering to the rules for the use of military titles), Varnhagen thought Fonseca might not have wished to publish it under his own imprint. To support his theory, Varnhagen cited the facts that Alpoim was a native of Brazil, that the work was written there and dedicated to Gomes Freire de Andrade, Governor of Brazil, and that the letters to the author in the preliminary leaves are from Brazilians. The most puzzling evidence of all is plate XVII, which has "Rio 1749" engraved in the lower right-hand corner. If this plate was engraved and printed in Brazil, it would be the earliest extant Brazilian engraving. Even Borba de Moraes, who argues strongly that the *Exame de bombeiros* and *Exame de artilheiros* were printed in Madrid and Lisbon, as their respective title-pages state, could give no convincing explanation of the plate XVII inscription.

Alpoim was born in Rio de Janeiro and served as professor at the Aula de Fortificação in Rio de Janeiro; at his death in 1770 he held the rank of Brigadier.

The engraved portrait of Gomes Freire de Andrade is signed by Olivarius Cor. Soares notes that nothing is known of this artist except that he worked in Portugal from 1744-1748, and may have been one of the foreigners invited by D. João V.

The other plates, which illustrate geometric figures, cross-sections of cannons, and ballistics, are signed by José Francisco Chaves, about whom Soares had no biographical information.

* Borba de Moraes (1983) I, 25-7: "famous and rare"; *Período colonial* 9-10. Alden & Landis 748/2. Sacramento Blake IV, 422. Innocêncio IV, 326. Pinto de Mattos (1970) p. 505. Carvalho, *Dicionário bibliográfico militar portugues* I, 58-9. Soares, *História da gravura artística em Portugal* 499-500. Bosch 194 (cf. 187). Mindlin, *Highlights* 384. Indiana University, Lilly Library, *Brazil* 48. Not in Rodrigues. On Olivarius Cor, see Soares, *História da gravura artística em Portugal* I, 171, nº 499 (under Chaves); on Olivarius Cor, see I, 180-185 (this work not listed). *NUC*: DLC-P4, ICN. OCLC: 35175211 (Catholic University-Oliveira Lima Library, Library of Congress, Newberry Library, Brown University); 18678333 (Arizona Historical Society, University of Michigan, University of Mississippi); 79814401 (John Carter Brown Library); 257680375 (Universitä Göttingen); 433371703 (Biblioteca Nacional de España). Porbase lists a copy at the Biblioteca Nacional de Portugal, and another copy there with the imprint "Lisboa: Imp. Regia 174?" Not located in Jisc. KVK (51 databases searched) repeats Porbase.

3. BARBOSA, Francisco de Villela, later 1.º Visconde and still later 1.º Marquês de Paranaguá. *Breve tratado de geometria spherica ... em additamento aos seus Elementos de geometria.* Lisbon: Typ. da Academia Real das Sciencias, 1817. 8°, later wrappers (slightly soiled, chipped along spine). Title page slightly soiled; uncut and partially unopened. Overall in very good condition. 30 pp., 1 folding engraved plate of diagrams. Lacks the three unumbered advertisement leaves at the end. \$150.00

FIRST EDITION. It was later reprinted as part of the author's *Elementos de geometria* (first published in 1816? see Borba de Moraes), which was widely used as a geometry



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textbook in Portugal and Brazil through the nineteenth century. Villela Barbosa (1769-1846), a native of Rio de Janeiro, taught mathematics at the Academia Real de Marinha and was an officer of the Academia Real das Sciencias. Having served in the 1821 Côrtes, he returned to Brazil in 1823 at the conclusion of that Parliament, and was one of the three negotiators who concluded the 1825 treaty by which Portugal recognized Brazilian independence. He later held high government offices in Brazil. Created 1.° Visconde de Paranaguá by the Brazilian Emperor D. Pedro I in 1825, and 1.° Marquês in 1826, Villela Barbosa is better known for his poetry, e.g., *Poemas*, Coimbra, 1794, and *Primavera*, Lisbon 1821.

*Borba de Moraes (1983) I, 75: collating as our copy; *Período colonial* p. 54. Innocêncio III, 81-2: calling for only 28 pp. and 1 plate. Sacramento Blake III, 134-7: also calling for 28 pp. Not in JCB, *Portuguese and Brazilian Books* (but JCB has this according to Josiah). W. Martins, *História da inteligência brasileira* II, 5-7 ("um árcade retardatário, um clássico extemporâneao e um mau poeta"), 177, 212. Veríssimo, *História da literatura brasileira* (1969) pp. 87, 113, 119. Not located in *NUC*.

*4. CANGALHAS, João Pedro Ferreira. *Opusculos de arithmetica universal, publicados com a protecção da Academia Real das Sciencias e dedicados ao ... D. Francisco Benedicto de Sousa Lancastre, e Noronha, nono Conde do Prado, e sexto Marquez das Minas.* 3 volumes in 1. Lisbon: Na Officina da Mesma Academia [Real das Sciencias], 1795. Large 4° (27.2 x 20 cm.), contemporary tree sheep (minor wear to corners, some worm damage near head of spine), flat spine, gilt, green and crimson morocco lettering pieces, gilt letter, triple gilt fillets in rectangle along borders of covers, gilt tooling to edges of covers and spine. Woodcut device of Academia Real das Sciencias on title pages. Mathematical equations, symbols and tables in text. A large-paper copy, clean, crip[] sp, in near-fine condition; fine to very fine internally. (8 ll.), 285 pp.; (4 ll.), 158 pp.

3 volumes in 1. \$1,200.00

FIRST EDITION, first (?) issue, with the original leaves Aa3 in volume I, and B4, C1, C4, D1 in volume II, as opposed to the cancel leaves present in most copies. Writing in 1934, Francisco Gomes Teixeira stated that aspects of this comprehensive algebra textbook were still of use (*História das matemáticas em Portugal*, p. 235). The work consists of 2 volumes of *Opusculos*, in which algebraic concepts are defined and illustrated through sample problems, and a third volume titled *Taboada de quadrados dos numeros naturaes*, *publicadas com a protecção da Academia Real das Sciencias*, which lists the square of all whole numbers from 1 to 8,699.

Each of the three title pages bears the imprint Lisboa: na Officina da mesma Academia, 1795. There are four *Opusculos* in the first volume, two in the second. They are: I. "Theoria preliminar dos numeros inteiros"; II. "Das equaçoens indeterminadas do primeiro grão"; III. "Instrucção às equaçoens indeterminadas do segundo grão"; IV. "Introdução ás fracçoens continuas"; V. "Introdução a diversas theorias dos numeros inteiros"; and VI. "Das fracçoens decimaes periodicas".

The chainlines run horizontally throughout in the present copy, as opposed to the normal-size copy we have, which is a bibliographical curiosity, with the chainlines

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running horizontally in volume I, vertically in volume II, and both horizontally and vertically in the *Taboada*.

Ferreira Cangalhas was an officer in the army engineering corps who entered civilian life to teach mathematics privately. He published several other works on weights and measures. The work is dedicated to D. Francisco Benedicto de Sousa Lancastre e Noronha, 9th Conde do Prado and 6th Marquez das Minas.

A rare work: as specialists in Portuguese books doing business since 1969, this is one of only three copies we have had or seen on the market, and the only one in large paper. Moreover, and curiously, the work does not appear for sale in various catalogues of the Academia Real das Sciencias issued during the late 1790s and first quarter of the nineteenth century that were included at the end of the Academia's publications. This is in contrast to many other works published by the Academia Real das Sciencias which long remained in print.

* Cf. Innocêncio IV, 7 (citing only the two volumes of *Opusculos*, with the date 1796, and without giving any collation), and *Grande enciclopédia* XI, 185 (repeating the date 1796 for the *Opusculos*). We have not been able to locate any copy dated 1796. OCLC: 560204700 (British Library). Porbase cites a single copy only (21 cm. tall) with the date 1795 at the Universidade Católica João Paulo II, Lisboa, with (10), 80 pp. [We have been informed that the copy at the Universidade Católica actually contains both volume II of the *Opusculos* and the *Taboada*.] Porbase cites as well two copies in the Archivo Nacional da Torre do Tombo (apparently on 2 of the 3 volumes). Also cited in Porbase is an incomplete copy of an earlier issue dated 1794, examined by us, containing only opusculos 2, 3 and 5, all in small quarto format. While there was not the opportunity to view the copies side by side, we think they are from the same setting of type, with minor variations. Not located in Jisc. Not located in Hollis, Orbis, Melvyl, Socrates, Library of Congress Online Catalog, Clio, Catnyp, Mirlyn or Josiah.

BOUND WITH:

CANGALHAS, João Pedro Ferreira. *Taboada de quadrados dos numeros naturaes, publicadas com a protecção da Academia Real das Sciencias de Lisboa* Lisbon: Na Officina da Mesma Academia, 1795. 4°, (1 blank l., 1 l.), 80 pp. Fine condition internally.

Bibliographic Curiosity

5. CANGALHAS, João Pedro Ferreira. *Opusculos de arithmetica universal, publicados com a protecção da Academia Real das Sciencias e dedicados ao ... D. Francisco Benedicto de Sousa Lancastre, e Noronha, nono Conde do Prado, e sexto Marquez das Minas.* 3 volumes in 2. Lisbon: Na Officina da Mesma Academia [Real das Sciencias], 1795. 4°, contemporary marbled wrappers (spines mostly gone). Woodcut device of Academia Real das Sciencias on title pages. Mathematical equations, symbols and tables in text. Uncut, crisp and clean. Overall in fine condition. Internally very fine. (8 ll.), 285 pp. [Aa3 a cancel]; (4 ll.), 158 pp. B4, C1, C4, D1 are cancels. *3 volumes in 2.* \$500.00

FIRST EDITION, second (?) issue. Writing in 1934, Francisco Gomes Teixeira stated that aspects of this comprehensive algebra textbook were still of use (*História das matemáticas em Portugal*, p. 235). The work consists of 2 volumes of *Opusculos*, in which algebraic concepts are defined and illustrated through sample problems, and a third volume titled *Taboada de quadrados dos numeros naturaes*, *publicadas com a protecção da Academia Real das Sciencias*, which lists the square of all whole numbers from 1 to 8,699.

Each of the three title pages bears the imprint Lisboa: na Officina da mesma Academia, 1795. There are four *Opusculos* in the first volume, two in the second. They are: I. "Theoria preliminar dos numeros inteiros"; II. "Das equaçoens indeterminadas do primeiro grão"; III. "Instrucção às equaçoens indeterminadas do segundo grão"; IV. "Introdução ás fracçoens continuas"; V. "Introdução a diversas theorias dos numeros inteiros"; and VI. "Das fracçoens decimaes periodicas".

This work is a bibliographic curiosity. Imposed in quarto format, the chainlines run horizontally in volume I, vertically in volume II, and both horizontally and vertically in the *Taboada*.

Ferreira Cangalhas was an officer in the army engineering corps who entered civilian life to teach mathematics privately. He published several other works on weights and measures. The work is dedicated to D. Francisco Benedicto de Sousa Lancastre e Noronha, 9th Conde do Prado and 6th Marquez das Minas.

A rare work: as specialists in Portuguese books doing business since 1969, this is one of only three copies we have had or seen on the market. Moreover, and curiously, the work does not appear for sale in various catalogues of the Academia Real das Sciencias that were included at the end of the Academia's publications that were issued during the late 1790s and the first quarter of the nineteenth century. This is in contrast to many other works published by the Academia Real das Sciencias that long remained in print.

* Cf. Innocêncio IV, 7 (citing only the two volumes of *Opusculos*, with the date 1796, and without giving any collation), and *Grande enciclopédia* XI, 185 (repeating the date 1796 for the *Opusculos*). We have not been able to locate any copy dated 1796. Not located in *NUC*. OCLC: 560204700 (British Library). Porbase cites a single copy only (21 cm. tall) with the date 1795 at the Universidade Católica João Paulo II, Lisboa, with (10), 80 pp. [We have been informed that the copy at the Universidade Católica actually contains both volume II of the *Opusculos* and the *Taboada*.] Porbase cites as well two copies in the Archivo Nacional da Torre do Tombo (apparently on 2 of the 3 volumes). Also cited in Porbase is an incomplete copy of an earlier issue dated 1794, examined by us, containing only opusculos 2, 3 and 5, all in small quarto format. While there was not the opportunity to view the copies side by side, we think they are from the same setting of type, with minor variations. Not located in Jisc. Not located in Hollis, Orbis, Melvyl, Socrates, Library of Congress Online Catalog, Clio, Catnyp, Mirlyn or Josiah.

BOUND WITH:

CANGALHAS, João Pedro Ferreira. *Taboada de quadrados dos numeros naturaes, publicadas com a protecção da Academia Real das Sciencias de Lisboa* Lisbon: Na Officina da Mesma Academia, 1795. 4°, (1 blank l., 1 l.), 80 pp. Very fine condition internally.



Item 7

Conversion of English and Portuguese Measures

6. [CANGALHAS, João Pedro Ferreira]. *Taboas das unidades de pezo e medida de Lisboa e Londres ….* Lisbon: Officina de Joaquim Rodrigues d'Andrade, 1813. Oblong folio, later quarter cloth. Internally very fine. Rubber stamp of Henrique Cezar in lower margin of final page. (4 ll.), 24 pp. \$250.00

FIRST and ONLY EDITION [?]. Gives tables allowing conversion from English to Portuguese measures, for solids and liquids. The author notes in the introduction that one could not perform such conversions directly using Samuel Ricard's *Traité*. Ferreira Cangalhas was an officer in the army engineering corps who entered civilian life to teach mathematics privately.

* Innocêncio IV, 7; X, 326. Fonseca, *Pseudónimos* p. 136. Not located in *NUC*. Not located in Porbase. Not located in OCLC. Not located in Jisc.

First Appearance of Euclid in Spain

7. EUCLID. Los seis libros primeros dela geometria de Euclides. Traduzidos en lengua española por Rodrigo Çamorano astrologo y mathematico, y cathedratico de cosmographia por su Magestad en la casa de la Contratacion de Seuilla. Dirigidos al illustre señor Luciano de Negron, canonigo dela sancta *yglesia de Seuilla*. Seville: En Casa de Alonso de la Barrera, 1576. 4°, contemporary limp vellum (ties missing, light stains), vertical manuscript short author and title on spine, in a recent quarter brick-red morocco over reddish-orange cloth folding box. Large woodcut arms of dedicatee on title-page. Numerous woodcut geometric designs in text. Large (13-line) woodcut initial on first page of text; a few 4- and 5-line initials. Woodcut vignette tailpiece. Crisp. Light dampstain in lower blank margin of final 20 leaves. In fine condition. Bookplate from the Landau library, number 64704. 121, (1) ll., signed A⁴, B-P⁸, Q⁴, R². A4 missigned "4", M2 missigned "M3". Leaf 11 unnumbered, 51 misnumbered 42, 78 misnumbered 70, 84 misnumbered 76, 103 misnumbered 102, 105 misnumbered 108, and 116 misnumbered 108. \$18,000.00

First Edition in Spanish, and the only edition of this translation prior to a Salamanca 1999 reprint. It is also the first printing of any text by Euclid in Spain, in any language. Zamorano (b. 1542) was professor of cosmography at the Casa de la Contratación de las Indias, as well as an astrologer and mathematician. He later became *piloto mayor* to King Philip II and wrote the official navigation manual of the Spanish Navy at the time of the Armada. In the present book, he emphasizes the sciences of mechanics, astronomy, and cosmography.

Thomas-Stanford comments that this volume has the appearance of a schoolbook,

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Item 7

which would account for its rarity, and notes that the few copies he had been able to examine were rather worn (pp. 16-17).

Euclid's *Elements*, a collection of definitions, axioms, theorems, and proofs in 13 books (of which six are included in this translation) is the oldest extant deductive treatment of mathematics, and played an important role in the development of logic and modern science. One of the world's most successful and influential textbooks, it was first published in Venice, 1482, and has appeared in over a thousand editions.

* Thomas-Stanford 43. Adams E1018. BL, *Pre-1601 Spanish STC* p. 74 (British Library copy with title-page mutilated). Palau 84721. Beardsley 95 (listing copies at the Biblioteca Nacional de España and University of Michigan). *Catálogo colectivo* E903. Salvá 2570. Heredia 4494. Steck III, 88. Duarte, *Euclides, Arquimedes, Newton* pp. 46, 48. Honeyman 1011. Riccardi, *Bibliografia euclidea*, 1576 (1). Not in HSA. *NUC*: MiU, MB. OCLC: 23621006 (Burndy Library, Indiana University, Houghton Library-Harvard University, University of Michigan, Brown University, Cambridge University, National Library of Wales), 560851127 (British Library); 266086700 (Cambridge University); 57317460 (microfilm copy: Center for Research Libraries, ProQuest). CCPBE locates sixteen copies. Not located in Rebium (which cites Salamanca 1999 and Mairena del Aljarafe 2006 editions). Jisc repeats the two copies at Cambridge University. Not in Orbis (which lists the Salamanca 1999 edition at SML). KVK (51 databases searched) adds one copy at Biblioteca Nazionale Centrale-Roma, and one at Biblioteca Casanatense-Roma.

Textbook on Navigation by Portuguese Naval Officer

*8. FREITAS, António Gregorio de. Tratado de navegar, ou esclarecimentos precisos em caso de duvida muito util aos navegantes, e com particularidade para os principiantes que se dedicão á Marinha, e Pilotagem. Lisbon: Na Typographia Patriotica, 1823. 4°, contemporary quarter red morocco over marbled boards (corners worn; spine rubbed; other minor binding wear), smooth spine gilt, text-block edges sprinkled. Woodcut Portuguese-Brazilian royal arms on title page. Geometrical diagrams, arithmetical and other tables in text. Foxing to blank margins of folding tables, otherwise clean and crisp. Overall in very good condition. 164 pp. [pp. 153 and 153 and large folding tables, with the versos blank].

FIRST and ONLY EDITION of this textbook on navigation.

The author entered the Portuguese navy at a tender age. He achieved the rank of Capitão de mar e guerra da Armada Nacional e Real, later that of Contra-almirante. He received a number of decorations in Portugal and from the Emperor of Brazil, and died aged 85 in 1876. He wrote several other books on navigation and maritime matters and some poetry.

* Innocêncio I, 153 (without collation); on the author, see also VIII, 167; and XX, 226. OCLC: 60775720 (Newberry Library, British Library). Porbase locates two copies, both in the Biblioteca Nacional de Portugal. Jisc repeats British Library. Not located in Library of Congress Online Catalog, Catnyp, Hollis or Orbis.



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Para saber a differença de Latitude, se faz a seguinte Analogia:

O raio he para a distancia, assim como o seno do complemento do rumo he para a differença da Latitude. Differença ascencional, he hum excesso que ha do

- mais, ou de menos de seis horas.

Para achar o apartamento plano, se faz a seguinte Analogia:

O raio he para o seno do complemento da Latitude media, assim como a differença de Longetude he para o apartamento.

EXEMPLO.

Estando na Lat. N. 36°,,46' Long. 3°,,44' quer hir para cabo de S. V. que está na Lat. N. 37°,,02' Long. 9°,,08'



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Modo de achar a declinação do Sol, em gráos, minutos, e segundos.

EXEMPLO.

Estando no dia 10 de Agosto, 110°,,00 a Leste, saber a declinação do Sol neste lugar.

Primeiramente se procura nas Taboadas, ou Almanaque Nautico, a declinação do dia 10, e a do dia 11, e se tirará a differença; os minutos que der se multiplicarão por 60, e teremos a quantidade de segundos, e depois se faz a seguinte Analogia:

Dec. do dia 10	=15°,,01',,16"	$360^{\circ}: 1074^{\circ}::110^{\circ}:X=$
Dec. do dia 11	=15°.,03'.,22"	110
		1 M 24_11
	17 ,,54	10740
	60	10740
		360°,
	1020	
	54	01014 28' 5'
		02940
	1074''	0040
	Declinação do dia	$10 = 15^{\circ}, 21^{\circ}, 16^{\prime\prime}$
		5 ,,28
Dec. do Sol d	leste dia, nesta al	ura=15,,26,,44

Advice on Using Navigational Instruments, Finding the Range for Artillery, and Employing Water Channels

9. [GARCIA] DE CESPEDES, Andres. Libro de instrumentos nuevos de geometria muy necessarios para medir distancias, y alturas, sin que intervengan numeros, como se demuestra en la practica. De mas desto se ponen otros tratados, com es uno, de conduzir aguas, y otro una question de artilleria, en donde se ponen algunas demostraciones curiosas. Madrid: Por Juan de la Cuesta, 1606. Small 4°, recent tan antique calf, covers elaborately decorated in blind, spine lettered and decorated in blind with raised bands in six compartments, blind-stamped inner dentelles, text-block edges sprinkled blue-green from an earlier binding. Numerous interesting woodcut mathematical diagrams. Woodcut factotum initials; woodcut headpiece on recto of first numbered leaf. One diagram cropped at outer margin with loss of about .5 cm., due to the fact that the diagram is substantially larger than the page; two other diagrams just touched, for the same reason: this problem is almost inevitable. Very minor light spotting. In very good to fine condition. Contemporary inscription on title page: "Este libro es de P[ed]ro de Fuentes Pintor, Vno [i.e., 'vecino'?] de Vallid [i.e., 'Valladolid'?]." Old small ownership stamp on title-page and verso of final leaf. (4), 68 leaves; \P^4 , A-R⁴. \$10,000.00

FIRST AND ONLY EDITION of this important work on mathematical instruments for purposes such as hydraulics, ballistics, and other geometrical problems. It includes a description of geometrical instruments (a type of quadrant and Jacob's staff) that allow one to measure, for example, the height of a tower and the distance across a plain. It is followed by Cespedes' explanation of how the town of Burgos should have channeled water from one place to another: the city officials ignored his advice, spent considerable money on a project that failed, and then had no money to redo the project according to Cespedes' advice. Finally, there is an essay on the best range for artillery, written at the request of a lieutenant general of artillery in Lisbon, to settle a dispute between him and some colleagues.

Garcia de Cespedes (d. 1611), an astronomer and mathematician, was royal cosmographer. The leaf following the title lists eleven works written by him.

* Palau 98620. Picatoste y Rodriguez 313. Ensayo de bibliografia marítima española 1240. Simón Díaz VIII-3846. Frank Streeter 220. Goldsmith, Short Title Catalogue of Spanish and Portuguese Books 1601-1700 in the Library of the British Museum G61. Perez Pastor 935. *NUC*: NN, CU. OCLC: 559011472 (British Library); 637199798 (Eth-Bibliothek Zurich); 55275677 (Biblioteca Nacional de Chile); 257713091 (Herzog August Bibliothek); 66353427 (Universiteit Leiden). CCPBE locates sixteen copies, three of which are incomplete. Rebiun locates two copies, at Universitat de Barcelona and Universidad de Sevilla. Jisc locates copies at the British Library and the Middle Temple Library.



Item 9





Item 10

Encyclopedic Work on Oriental Languages and Cultures

10. HERBELOT DE MOLAINVILLE, Barthélemy d'. Bibliotheque Orientale ou Dictionaire Universel contenant Generalement tout ce qui regarde la connoissance des Peuples de l'Orient. Leurs histoires et traditions veritables ou fabuleuses, leurs religions, sectes et politique. Leurs gouvernement, loix, coütumes, moeurs, guerres, & les révolutions de leurs empires. Leurs sciences, et leurs arts. Leurs théologie, mythologie, magie, physique, morale, médecine, mathématiques, histoire naturelle, chronologie, géographie, observations astronomiques, grammaire, & réthorique. Les vies et actions remarquables de tous leurs saints, docteurs, philosophes, historiens, poëtes, capitaines, & de tous ceux qui se sont rendus illustres parmi eux, par leur vertu, ou par leur savoir. Des jugemens critiques, et des extraits de tous leurs ouvrages, de leurs traitez, traductions, commentaires, abregez, recüeils de fables, de sentences, de maximes, de proverbes, de contes, de bons mots, & de tous leurs livres écrits en Arabe, en Persan, ou en Turc, sur toutes sortes de sciences, d'arts, & de professions. Paris: Par la Compagnie des Libraires, 1697. Folio (38.5 x 26.5 cm), a distinguished binding in a sorry state: early full mottled calf (scuffed, edges much worn), gilt spine with raised bands in seven compartments (crude repairs to spine, especially at head and foot, both joints cracking), gilt-tooled arms on spine of Rohan-Soubise (see below). Title page printed in red and black; elaborate woodcut headpieces, tailpieces and initials. Scattered foxing and light browning; paper defect in margin not affecting text on Rrr iii; tear in text without loss on Hhhh ii. Internally very good; overall in good condition. Bound for Charles de Rohan, Prince de Soubise et d'Epinoy, duc de Rohan-Rohan (1715-1787) (see below). Scattered early marginal notes in various hands. On title page, a three-line purchase inscription dated 1921 and four-line purchase inscription from Santos (?), dated 1922, noting offer to Salazar (?). Engraved frontispiece portrait, (16 ll.), 1059 (1) pp., with frequent mispagination (see below). \$1,400.00

FIRST EDITION of an encyclopedic work on oriental languages and cultures: Herbelot de Molainville read Arabic, Turkish, Persian, Aramaic, Syriac, and Hebrew. An ambitious work 3 decades in the making, the *Bibliothèque orientale* was completed and published posthumously by Antoine Galand. It is largely a translation of the Arabic bibliography of Hadji Khalfa, but incorporates many other Arabic and Turkish compilations: about 100 are cited as sources in the preliminary leaves. It is written in the form of a dictionary, from "Ab" to "Zouzeni," with a supplement (pp. 941-1032) and a lengthy subject index (pp. 1033-59). As set out on the title page, the *Bibliothèque* covers topics ranging from poetry, fables, mythology, and morals to mathematics, medicine, and astronomy.

Brunet noted that from 1697 to 1776 no new compendium had been written, so that although it was somewhat out of date, the *Bibliothèque* continued to be "toujours



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très-recherché." It was printed again at Maastricht, 1776, with a supplement of 1780 by Claude de Visdelou. Editions also appeared in Paris, 1781-84, and The Hague, 1777-99.

Barthélemy d'Herbelot de Molainville (Paris, 1625-Paris, 1695) was one of the leading scholars of oriental languages of the seventeenth century. After studying Asian languages at the University of Paris, he sought to gain fluency by speaking with Asians in Italian seaports. After living on a pension in Fouquet's home, he was appointed secretary and interpreter of Eastern languages for the king of France. Grand-Duke Ferdinand II of Tuscany tried to lure him away, but Colbert persuaded Herbelot to return to France. In 1692 he became chair of Syriac at the Collège Royal.

The volume includes numerous errors in pagination and quire signatures: pagination skips 305-306 but text follows. Page 324 misnumbered as 316. Page 461 is misnumbered as 469. Leaf Rrr iij is not signed. Leaf Yyy iij is missigned as Zzz iij. Pages 800-801 repeat, but text follows. Page 871 is misnumbered as 863. Page 1040 is misnumbered as 1400. Leaf Zii is misbound following Ziii.

Provenance: gilt-tooled arms on the spine are Olivier plate 2034, Stamps 8 and 9. Charles de Rohan was a bibliophile who led an impressive military career and rose to the rank of Marshal of France. He was an intimate of King Louis XV and Madame de Pompadour.

* Brunet II, 664. Zischka 15. Graesse II, 376. Hamilton, *Europe and the Arab World*, 36: "one of the landmarks in Arabic studies." Not in the Atabey sale, which had the editions of Maastricht, 1776 and Paris, 1781-84 (lots 563-564).

*11. LEITÃO, Henrique Sousa, ed. O *livro científico dos séculos XV e XVI: ciências físico-matemáticas na Biblioteca Nacional.* Lisbon: Biblioteca Nacional, 2004. Bibliografias, BN; Colecções, BN. 8°, original illustrated wrappers. As new. One of 750 copies. (l blank l.), [3]-533 pp., (1 l.), illustrations. ISBN: 972-565-384-X. \$50.00

FIRST and ONLY EDITION.

Complete Run of an Erudite Review from the 1920s

*12. Lusitania. *Revista de estudos portugueses*. 10 issues bound in 4 volumes. Lisbon: Oficinas Gráficas da Biblioteca Nacional, January 1924-October 1927. Large 8°, somewhat later (prior to 1941) half calf over marbled boards (only the slightest wear to extremities), spines gilt with raised bands in six compartments, citron leather lettering and numbering pieces in second and fourth compartments from head, marbled endleaves, upper edges rouged, other edges uncut, original printed wrappers bound in, silk ribbon place markers in first three volumes. Illustrations in text. Small repair to blank margin of pp. [1-2] of the first issue. A handsome set in very good condition. Brown on beige (volume I) and brown on light blue-green (volumes II-IV) small



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printed paper binder's tickets of "A Carmelita, Calçada do Sacramento 29, Lisboa" in upper outer corners of versos of front free endleaves. (2 ll.), 491, (1) pp., (2 ll.), 10 plates; (2 ll.), 378 pp., (2 ll.), 8 ll. plates; (2 ll.,) 498 pp., (2 ll., 1 blank l.), 23 ll. plates; 206 pp., (1 blank l.), 15 ll. plates. *10 issues bound in 4 volumes.* \$500.00

FIRST and ONLY EDITION-A COMPLETE RUN of this erudite review. Edited by Carolina Michaëlis de Vasconcelos and published by Luís da Câmara Reis, it included contributions by some of the most important intellectuals of the time, ranging from monarchists, to republicans of the "Grupo da Biblioteca," to the social democratic thinker António Sérgio. Some of the most significant collaborators were Afonso Lopes Vieira, Agostinho de Campos, António Sardinha, Sérgio, Carlos Malheiro Dias, and José Leite de Vasconcelos. Included were articles on history, archeology, painting, music, literary history and criticism, philology, etc. The double issue 5/6 is devoted to Luís de Camões, including an interesting previously unpublished letter by the poet with commentary by José Maria Rodrigues, followed by texts by the editor, Afrânio Peixoto, Joaquim de Carvalho, António Baião, Luciano Pereira da Silva, and others. The final issue is devoted to the memory of Carolina Michaëlis de Vasconcelos, including a bibliography of her writings, with texts by J. Leite de Vasconcelos, José Maria Rodrigues, José de Figueiredo, Afonso Lopes Vieira, Reynaldo dos Santos, and Edgar Prestage on Sir Richard Burton. The second issue reproduces a previously unpublished design by Rembrandt. There are two articles by Jaime de Magalhães Lima on Eça de Queiroz (issues 3 and 8), one by Ricardo Jorge on Renaissance medicine (issue 2), a letter and interview with Wenceslau de Moraes (issues 3 and 4), Joaquim de Vasconcelos on Dürer's portrait of Damião de Goes (issue 2), Pedro de Azevedo on a letter from the Viceroy of India to the Emperor of Japan (issue 9), and much more.

The bindery "A Carmelita" was founded in 1926 by Frederico d'Almeida, probably the best Portuguese bookbinder of the twentieth century. He worked there until 1940 before moving to Rua António Maria Cardoso, 31, ao Chiado, where he continued to work under his own name until the 1970s. Among his illustrious clients were the exiled King Umberto II of Italy and the Conde de Barcelona. See Matias Lima, *Encadernadores portugueses*, pp. 19-23.

* Pires, Dicionário da imprensa periódica literária portuguesa do século XX (1900-1940), pp. 225-7. Clara Rocha, Revistas literárias do século XX em Portugal, p. 646. Santos, Exposição bibliográfica de Afonso Lopes Vieira, pp. 19 & 27.

13. [MACEDO, José Tavares de.] *Biographia do Illm^o e Exm^o Senhor Francisco Simões Margiochi.* Lisbon: na Imprensa Nacional, 1838. Folio (28.5 x 22 cm.), unbound. Wood-engraving on title page of globe, book, navigational instruments, etc.Text in 2 columns. Woodcut tailpiece on final page of crossed trumpets and branches. Single horizontal foldline, some chipping at edges, 4-cm. marginal tear in gutter. Overall in good condition, if just barely. (1 l.), 8 pp. \$100.00

FIRST and ONLY EDITION of this concise biography of Francisco Simões Margiochi (Ajuda, 1774?-1838) a noted liberal and author of numerous works on mathematics and geometry. In the Côrtes Constituintes of 1821, he proposed the abolition of the Inquisition



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and the Jizo da Inconfidencia, and the creation of the national guard. During the subsequent battles between liberals and conservatives he was often in exile, but he returned to Porto and private life in 1836. This biography deals with both his political and scholarly life.

Innocêncio attributes this work to José Tavares de Macedo (Torres-vedras 1801?-1890), a member of the royal council, Commendador da Ordem de Christo, official in the Ministerio da Marinha e Ultramar, deputy to the Côrtes, and member of the Academia Real das Sciencias de Lisboa.

* Innocêncio V, 142, calling for 8 pp.; on the Tavares de Macedo, see also V, 458 and XIII, 226. On Margiochi, see Innocêncio III, 60; IX, 376. OCLC: 78075413 (Harvard University, calling for 8 pp.). Porbase locates four copies, three at the Biblioteca Nacional de Portugal and one at the Biblioteca Central da Marinha, and calls for 8 pp. only. Not located in Jisc.

14. MATA, José Melitão da. *Compendio do calculo da latitude no mar pela observação meridiana dos astros.* Lisbon: Na Officina de Simão Thaddeo Ferreira, 1789. 4°, recent olive Oasis morocco, spine with raised bands in five compartments, gilt letter, marbled endpapers. Finely engraved vignettes on title-page and p. 1; 58 engraved diagrams in text (see below). Some minor staining and soiling. Overall clean and crisp, in very good to fine condition. (1 l.), 134 pp. \$1,200.00

FIRST EDITION. Gives rules for fixing one's position at sea by the stars, with sample diagrams and calculations.

The title-page vignette shows Poseidon and an allegorical female flanking the Portuguese coat of arms; behind them are a row of columns topped by Muses and the ocean, with a tall ship approaching and seagulls. On the first page, the half-page vignette shows three putti holding navigational tools at the lower left; at the right are two tall ships and a castle (the Torre de Belém?); at the top of the semicircular frame is the sun. Outside the frame, two putti supply wind to move the ships. The 58 diagrams demonstrate how to calculate latitude at sea; each shows the zenith and the globe with meridians and compass directions, plus one other factor (e.g., the position of the sun, moon, or a star) that is required to calculate the latitude. Among the stars used are the North Star, Procyon (the brightest star of Canis Minor), Rigel (Orion constellation), Spica (Virgo constellation), Aldebaran (Taurus constellation), Castor (Gemini constellation).

Mata (d. 1809) taught navigation in Lisbon and wrote several other handbooks for pilots.

* Not in Innocêncio; cf. V, 74-75. *Ticknor Catalogue* p. 521. *NUC*: NN; a copy with the date [1788] is cited at MB, but the Ticknor *Catalog* gives the date as 1789. OCLC: 39555943 (New York Public Library). Not located in Porbase. Not located in Jisc.



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***15. PORTUGAL, Biblioteca Nacional.** *Pedro Nunes, 1502-1578: novas terras, novos mares e o que mays he: novo ceo e novas estrellas. Apresentação by Carlos Reis. Introduction by Henrique Leitão.* Lisbon: Biblioteca Nacional, 2002. Colecções BN. Large 8°, original illustrated wrappers. As new. 301 pp., (1 l.), footnotes, much illustration in text, some in color. One of 1,000 copies. ISBN: 972-565-339-4. \$35.00

FIRST and ONLY EDITION. The introduction by Leitão occupies pp. 15-30; it is followed by Raul Esmeriz Delerue, "Pedro Nunes, contributo para uma síntese referenciada da sua bibliografia" (pp. 31-44); Leitão, "Sobre as 'obras perdidas' de Pedro Nunes" (pp. 45-66); Leitão, Ana Cristina Silva, Lígia Martins, and Teresa Duarte Ferreira, "Autógrafos e outras inscrições atribuídos a Pedro Nunes" (pp. 67-96). The exhibition catalogue occupies pp. 97-281. It is followed by useful indexes.

16. STOCKLER, Francisco de Borja Garção, later 1º Barão da Villa da Praia. *Compendio da theorica dos limites, ou introducção ao methodo das fluxões.* Lisbon: Na Offic. da Academia R. das Scienc., 1794. 8°, later quarter sheep over decorated boards, flat spine with gilt bands and ornaments, text-block edges sprinkled blue. Woodcut vignette of the Real Academia das Sciencias on title page. Much mathematical notation in text. Pinpoint wormhole through first 9 leaves, touching an occasional letter. Clean and crisp. Overall in very good condition. (3 ll. including half title, title, and Artigo), xiv, 100 pp., (1 l. errata), 1 folding engraved plate with mathematical diagrams, (2 ll. advt.).

FIRST EDITION of an essay on the use of geometry to measure fluxions, the first published work by Stockler (1759-1829), who became a well known mathematician. "Fluxions" was Newton's term for differential calculus; his *Method of Fluxions* was completed in 1671 and published in 1736.

Stockler (1759-1829), a native of Lisbon, was trained at Coimbra as a mathematician, but spent most of his life involved in politics, and rose to the rank of lieutenant general in the army. He was so vocally in favor of the French Revolution that he was charged in 1808 with being among those who plotted to overthrow D. João VI. After going to Brazil to plead his case before the King, Stockler did a complete about-face and became a staunch absolutist. Following the 1820 revolution he was dismissed from his position as governor of the Azores and was imprisoned, but was reinstated with full honors after the absolutist triumph in 1823.

* Innocêncio II, 355: calling for xiv, 100 pp. and 1 plate. *NUC*: PPAmP, PPULC, MH, MB. OCLC: 84755511 (European Register of Microform and Digital Masters, Staatsbibliothek zu Berlin-Preussischer Kulturbesitz); 20143829 (Brown University, Harvard College Library, Houghton Library, Thomas Fisher Rare Book Library-University of Toronto, University of California-Berkeley, Bibliotheque de l'Inst de France, Bibliothèque nationale de France, Universitätsbibliothek Kiel, Niedersächsische Staats- und Universitätsbibliothek Göttingen); 558987601 (British Library); 82567599 (European Register of Microform and Digital Masters). Porbase locates three copies at the Biblioteca Nacional and one at the Universidade de Évora, calling for [4], 99 pp. plus a folding engraving. Jisc repeats British Library, adding Royal Society and Register of Preservation Surrogates. **17. TAYLOR, Michael.** A Sexagesimal Table, Exhibiting, at Sight, the Result of any Proportion, where the Terms do not Exceed Sixty Minutes. Also Tables of the Equation of Second Difference, and Tables for Turning the Lower Denominations of English Money, Weights, and Measures, into Sexagesimals of the Higher, and vice versa. And the Sexagesimal Table Turned into Seconds as Far as the 1000th Column, Being a very useful Millesimal Table of Proportional Parts. With precepts and Examples. Useful for Astronomers, Mathematicians, Navigators, and Persons in Trade.... Published by Order of the Commissioners of Longitude. London: Printed by William Richardson ... and sold by C. Nourse, in the Strand, and Mess. Mount and Page, on Tower-Hill, Booksellers to the said Commissioners, 1780. Large 4° (29.9 x 24.2 cm.), mid-twentieth-century half calf over marbled boards (some wear at corners, outer joints), spine with raised bands in six compartments, gilt bands, crimson morocco lettering piece in second compartment from head (slightly chipped), short author-title in gilt. Tables and mathematical formulas in text. Some light browning. Overall in good condition. xlv, (1) pp., (1 l. divisional title), 316 pp., 1 large folding table.

\$300.00

FIRST and ONLY EDITION. * ESTC T146651.

***18. TEIXEIRA, Francisco Gomes (1851-1933).** História das matemáticas em Portugal. Preface by Aníbal Scipião de Carvalho. Lisbon: Arquimedes Livros, 2006. 8°, original printed wrappers As new. vi, 300 pp. One of 90 copies. ISBN: 972-8917-12-0. \$45.00

Facsimile reprint of the first (and only previous) edition published in Lisbon by the Academia das Ciências, 1934.

Best Known Work of this Major Portuguese Enlightenment Figure

19. [VILLAS BOAS, Manuel do Cenáculo, Bishop of Beja, later Archbishop of Évora]. *Cuidados literarios do Prelado de Beja em graça do seu bispado. Lisbon*: Na Officina de Simão Thaddeo Ferreira, 1791. 4°, contemporary speckled sheep (some stains and wear but sound), spine gilt with raised bands in five compartments, crimson morocco lettering piece with gilt title in second compartment from head, text block edges sprinkled red, red silk ribbon place marker. Engraved royal Portuguese coat-of-arms on title page. Typographical headpiece and

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woodcut factotum initial on p. 1. Marginal soiling on errata leaf, and a few marginal notes. Overall in very good to fine condition; internally fine to very fine. Neat contemporary ink signature in lower margin of title page and margin of leaf A1. Author's name on title page, in red ink manuscript, in an early hand. (4 ll.), 552 pp., (1 l. errata). \$600.00

FIRST and ONLY EDITION of the author's best-known work. Pages 17-34 are on scientific methodology, and pages 91-157 discuss logic, geometry, and the study of mathematics. There are also sections on the study of Greek and Oriental languages (particularly Hebrew) and on theology.

The author (1724-1814) was an important figure in Portuguese literature and literary criticism during the Enlightenment. Son of a Lisbon blacksmith, he became a Franciscan at age 16, and studied and taught at Coimbra. He later served as Provincial of the Franciscan Order in Portugal (elected 1768), as Confessor for Principe D. José (appointed 1769), and first Bishop of Beja (appointed 1770). He was head of the Meza Censoria, and also of the Junta de Providencia Litteraria, the committee appointed by Pombal to reform the universities. When the Marquês de Pombal fell from power in 1777, Villas Boas retired from public affairs. In 1802 he was elected Archbishop of Evora, and while there suffered many indignities during the French invasion.

* Innocêncio V, 391. Palha 4310. Bell, *Portuguese Literature* p. 285. Saraiva & Lopes, *História da literatura portuguesa* (1976) pp. 618, 620. See also Francisco António Lourenço Vaz, ed., *D. Manuel do Cenáculo: Instruções pastorais, Projectos de bibliotecas, e Diário* (Porto: Porto Editora, 2009). OCLC: 13945563 (University of Arizona, Library of Congress, Newberry Library, Harvard College and Houghton Library, University of São Paulo); 165919489 (Bayerische Staatsbibliothek, Staatsbibliothek zu Berlin, Universitätsbibliothek München); 457387692 (Bibliothèque nationale de France, Université de la Sorbonne nouvelle); 503804016 (British Library). Porbase locates three copies at the Biblioteca Nacional de Portugal and two copies each at the Fundação Calouste Gulbenkian and the Biblioteca João Paulo II-Universidade Católica Portuguesa. Jisc locates a single copy, at British Library.

