

**Arfe y Villafañe, Juan de**

León 1535 – 1603 Madrid

**Quilatador de oro, plata, y piedras. Compuesto por Iuan de Arphe y Villafañe, natural de Leon, Escultor de Oro, y Plata, en las Casas Reales de la Moneda de Segovia.****Madrid, Antonio Francisco de Zafra (at the expense of Doña Maria del Ríbero), 1678**

QUARTO (200 × 140 mm), (212)ff. signed §<sup>8</sup> A–Z<sup>8</sup> Aa–Bb<sup>8</sup> Cc<sup>4</sup> and paginated (16) 1–408. Oval woodcut portrait of the author on title-page, woodcut ornament incorporating his heraldic insignia and initials preceding books 2–8, woodcut illustrations in books 1–2, initials, and other woodcut ornament.

PROVENANCE Earls of Macclesfield, Shirburn Castle, embossed stamp on title-page and following two leaves, exlibris *South Library* dated 1860 on paste-down — Sotheby's, 'The Library of the Earls of Macclesfield, Part Two: Science A–C', London, 10 June 2004, lot 191.

Lower outer corner of folio Aa4 torn away (loss of four letters on p.384), otherwise in fine state of preservation (other copies examined are printed on inferior paper now heavily browned).

BINDING eighteenth-century English calf, gilt frame on covers, back decorated in gilt.

**A** COLLECTED EDITION of Juan de Arfe's highly influential writings on the assaying of metals. The son and grandson of celebrated workers in precious metals, the author spent most of his early life in Valladolid, publishing there in 1572 for the use of artists engaged in similar work, his first book, the *Quilatador*, three chapters on methods of assaying, purifying, and alloying silver and gold; the correct use of the touchstone and alloy points, and the marks used to signify purity; and the weighing, sizing, and valuing of precious gems, including the 'square of the weight' rule for pricing diamonds.<sup>1</sup> He writes of Peruvian and Brazilian emeralds, mentions amethysts imported from the West Indies, and the pearl-fisheries of Panama, Cuba, and Cabo de Vela.<sup>2</sup>

<sup>1</sup> John Sinkankas, *Gemology: an annotated bibliography* (Metuchen, NJ & London 1993), nos. 215–218.

<sup>2</sup> See *European Americana, Volume I: 1493–1600*, edited by John Alden (New York 1980), pp.129, 239, for previous editions (1572, 1598); this 1678 edition overlooked in *European Americana, Volume IV: 1676–1700*, edited by Dennis C. Landis (New Canaan 1997).



Precision balance for the weighing of precious metals and stones (page height 200 mm)

At the time there were no standard methods of determining the presence of a metal in a mineral, or – of greater concern – the proportion of silver or gold in currency, and as a result fraud was rampant. Lawsuits pertaining to the fineness of practically all the coins struck at the Spanish mints were common. In a thoroughly revised edition of the *Quilatador* published at Madrid in 1598 (four chapters on problems of assaying, supplemented by a fifth on the valuation of precious stones), Juan de Arfe discusses certain of these lawsuits (1585–1586), which had resulted in a massive trial against the merchants and the assayers, and the subsequent passing in 1588 of new and definitive legislation. Excerpts from the new laws are printed, including one concerning fraudulent gems.<sup>3</sup>

<sup>3</sup> Cristóbal Pérez Pastor, *Bibliografía madrileña del Siglo XVI* (Madrid 1891), no. 561. *Iberian books: books published in Spanish or Portuguese or on the Iberian Peninsula before 1601*, edited by Alexander S. Wilkinson (Leiden & Boston 2010), pp.41–42 nos. 1114, 1116.

The present edition joins the three chapters of the Valladolid 1572 edition and five chapters of the Madrid 1598 edition, providing a complete anthology of Juan de Arfe's writings on assaying. Its first three chapters reprint the three chapters of the 1572 edition, with woodcut illustrations of precision balances, smelting furnaces, and other laboratory apparatus, faceted gems, and a diameter gauge for pricing pearls, all taken from the original blocks, except for those on four pages (pp.29–31, 36) which were recut. Then follow the five chapters of the 1598 edition, with the woodcut depicting *Juan de Arphe AE 50* taken from the original block. The new edition is dedicated to Don Pedro de Pomar by its publisher, Doña María del Ríbero, widow of Bernardo de Sierra, who in 1675 had reprinted Juan de Arfe's *De vera commensuración para la escultura, y arquitectura* (first edition 1585–1587), an equally influential work, on the elements of geometry and the anatomical proportions needed by an artist.

Like its predecessors, the 1678 edition is rare outside Spain, and is seldom found in good state of preservation.<sup>4</sup> Six copies are listed in the Spanish census of seventeenth-century books<sup>5</sup> and another eight are located by the online Catálogo Colectivo del Patrimonio Bibliográfico (CCPB) and Catálogo Colectivo de la Red de Bibliotecas Universitarias Españolas (REBIUN).<sup>6</sup> We trace two copies in France (Bibliothèque Nationale de France; Conservatoire national des arts et métiers, Paris), one in Germany (Kunstbibliothek of the Staatliche Museen zu Berlin), three in the United Kingdom (British Library, Wellcome Medical Library, Imperial College), and four in North America (New York Public Library, Smithsonian Institution, Burndy Library in the Huntington Library, Washington State University).

REFERENCES Antonio Palau, *Manual del librero hispano-americano* (Barcelona 1948), no. 16054 bis; *El Libro de arte en España*, catalogue of an exhibition held in the Hospital Real de Granada, XXIII Congreso Internacional de Historia del Arte, 3–8 September 1973 ([Granada] [1975?]), p.64 no. 93; Christian E. Dekesel, *Bibliotheca nummaria, II: Bibliography of 17th century numismatic books* (London 2003), p.64 A–62

<sup>4</sup> Miguel Calvo Rebollar, *Bibliografía fundamental de la antigua mineralogía y minería españolas* (Madrid 1999), p.61: 'La primera y segunda ediciones son muy raras. La tercera es algo más frecuente, aunque generalmente los ejemplares están mal conservados, debido a mala calidad del papel'.

<sup>5</sup> *Catálogo Colectivo del Patrimonio bibliográfico Español, Siglo XVII: A* (Madrid 1988), pp.216–217, no. 952.

<sup>6</sup> <http://www.mcu.es/>; <http://rebiun.absysnet.com>.