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## FIRST EDITION OF THE FIRST PRACTICAL TREATISE ON NAVIGATION

**Arte de navegar.**

**Author**

MEDINA, Pedro de

**Publication date**

1545.

**Publisher**

Francisco Frenandez de Cordova,

**Publication place**

Valladolid,

**Physical description**

Quarto, (295 by 210mm), eight parts in one, text in two columns with woodcut border, title-page and woodcut on f3v printed in red and black, with woodcut royal arms of Spain, section titles to each part, numerous woodcuts in text, including world map on d1r and woodcut map of the Atlantic Ocean with adjacent coasts of North and South America, Europe and Africa on d6r, limp vellum.

**Dimensions**

**Notes**

First edition of the first practical treatise on navigation; with the first appearance of Medina's seminal map of the Atlantic and Americas.

Pedro de Medina (1493-1567), was a mathematician, astronomer, and geographer. He started his career as tutor and librarian to the Dukes of Medina. He then began to practice cosmography, and became an examiner of pilots and sailing-masters in Seville in 1539. He was dissatisfied with the level of teaching and quality of the texts and charts he taught with, and wrote his 'Arte del navegar' to remedy the deficiency. This was the first European treatise on navigation, which is why de Medina "may be said to be the founder of the literature of seamanship" (Church).

Medina was with Hernan Cortes on his voyage of exploration to the New World. Later in his life, back in Spain, he collected information from returning pilots, and thus was in an extraordinarily advantageous position to compose a state-of-the-art map for his navigational manual when it was published in 1545. By 1549 he had become 'cosmografo de honor' after Charles V asked him to make navigational charts.

The 'Arte de Navegar' was the first work to give sailors reasonably correct information on the navigation of American waters, and the map is extraordinarily accurate, far in advance of any map in normal circulation, due largely to its Spanish provenance.

### The Map

Printed from a single wood block the map is the second Spanish printed map of the New World, after the Peter Martyr map of 1511. Extremely important as an early Spanish map of America, this is the definitive published depiction of eastern America, and is noteworthy for being among the few early published maps of America by someone who had actually travelled to America. All editions of the 'Arte de Navegar' are rare. The original Spanish woodcut is the rarest of all the printings, and the first state of the original block appeared only in the first issue of the 'Arte de Navegar'. The map was reprinted in the first edition of 'Libro de grandezas... de Espana', Seville, 1548, with the lower half extended to include the Strait of Magellan. The map was later printed in Martin Cortes's 'Breve compendio' of 1551 and Medina's 'Regimento de navegacion' of 1552.

The map charts the entire eastern seaboard and Gulf of Mexico in detail. Rio Espiritu Sanctus is probably the mouth of the Mississippi, and appears here within fresh memory of the de Soto expedition. The Yucatan appears here correctly as a peninsula, and in this is preceded only by the Gemma world map of one year earlier, but that work likely does so unintentionally as a result of its primitive cutting of the block. Curiously, the 1554 Italian edition of the Medina reverts back to the island configuration. The Isthmus of Panama itself is orientated nearly perfectly, so that at its neck one would correctly travel west to east if crossing from the Atlantic to Pacific, rather than east to west. In general, the Gulf is uncannily accurate; indeed, in this maiden appearance of 1545, there is no other obtainable document with such sophistication.

The map's depiction of the east coast is equally impressive. The Chesapeake and Delaware Bays are primitively recorded, still an area of considerable mystery in Europe at mid-century. Just north of Delaware Bay is a fat peninsula which juts into the Atlantic and whose eastern tip is fishtail shaped. This could be Long Island, or it could be Cape Cod. Its shape is that of Long Island, and its position relative to the previously mentioned bays is that of Long Island. If it is Long Island, then its basic accuracy is extraordinary, and would not be matched for many years.

The map labels this region 'bacallaos', after the cod fish which fishermen had reaped so plentifully from the Atlantic coast. By correlation to Newfoundland and Nova Scotia, this piece of land should be Cape Cod, sans its secondary extensions. Medina's designation of 'bacallaos', also, would suggest

a latitude more of the Cape than of Long Island. Yet another argument in favour of its being Cape Cod is its latitude, which at this point in time could, unlike longitude, be ascertained with reasonable accuracy: by absolute latitude it should be Cape Cod; it is, in fact, already slightly north of the Cape's true latitude, so it would be even further off if it were Long Island.

The answer to this paradox may be the latitudinal misplacing of entire sections. Two or more advanced prototypes may have been mis-aligned with each other; this 'Cape' may be both the Cape and Long Island, superimposed from different charts. Error in grid alignment was certainly a problem when composing an original map from the finest data available for each region.

Continuing further north, Medina charts the entrance to the St. Lawrence at about 54 degrees north, which is about 5 degrees too far north. This would be consistent with the error in Cape Cod's latitude. The map reaches up to 65 degrees north latitude. It is interesting to note that the 1545 map pre-dates the foundation maps of Gastaldi and Ramusio of the east coast, and rivals their geography though not exclusively focusing on that coast. Nordendkiold (p 50) comments that "notwithstanding its small size, this map is remarkable for its correct delineation of the Isthmus of Panama, for the insertion of the famous papal line of demarcation between the ultramarine possessions of Spain and Portugal and, finally, on account of its original being one of the few printed maps in the Pyrenean peninsula before A.D. 1570".

Spain was supreme in the exploration of the New World at this time, the knowledge of its geography was vastly superior to that of other nations, all of which is clearly reflected in the map. The consequences, politically, militarily, and economically, of revealing any of her knowledge were obvious to the Spanish Crown; it is primarily because of this that there were so few printed cartographical works during this time in Spain, and those that survive are very scarce.

Rarity

Although the work would become hugely popular throughout Europe and be translated into German, French, English and Italian, this original edition in Spanish is of extreme rarity. We are aware of only two other example appearing at auction since World War II: Sotheby's 1961; Sotheby's in 1989; and the same copy at Christie's in 2008, which made \$578,500.

### **Bibliography**

Adams, M-1027; Alden and Landis, 554/44; Burden, 19; Hattendorf, 20; Mortimer and Harvard, II:369; Palau, 159669; Sabin, 47345.

### **Provenance**

**Price:** £400000

**Inventory reference:** 34054