



7 inch radius sextant, lattice frame with silver scale 0-150° and vernier, seven shades, telescope, wooden handle, in fitted case.

NAVIGATIONAL SEXTANT

[Sextant].

Author

[Anonymous]

Publication date

[late 19th century].

Publisher

Publication place

Physical description

7 inch radius sextant, lattice frame with silver scale 0-150° and vernier, seven shades, telescope, wooden handle, in fitted case.

Dimensions

Notes

A sextant is a doubly reflecting navigation instrument that measures the angle between two visible objects. The primary use of a sextant is to measure the angle between an astronomical object and the horizon for the purposes of celestial navigation. The estimation of this angle, the altitude, is known as sighting or shooting the object, or taking a sight. The angle, and the time when it was measured, can be used to calculate a position line on a nautical or aeronautical chart — for example, sighting the Sun at noon or Polaris at night (in the Northern Hemisphere) to estimate latitude.

Sighting the height of a landmark can give a measure of distance off and, held horizontally, a sextant can measure angles between objects for a position on a chart. A sextant can also be used to measure the lunar distance between the moon and another celestial object (such as a star or planet) in order to determine Greenwich Mean Time and hence longitude. The principle of the instrument was first implemented around 1730 by John Hadley (1682-1744) and Thomas Godfrey (1704-1749), but it was also found later in the unpublished writings of Isaac Newton (1643-1727).

Bibliography

Provenance

Price:

Inventory reference: 12774