

## MADE TO COMMISSION

The Blagrave armillary sphere can be personalised in several different ways. For example, the bronze can be finished to a highly polished reflective surface, more suited to an indoor installation, or oxidized to a weathered verdigris. The dial can also be engraved with your choice of motto, quotation or dedication.

The cost of the dial including any personalisation, delivery and installation in mainland United Kingdom is £25,000 excluding VAT.



For further information or to arrange a viewing please contact:

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# DAVIDHARBER

THE BLAGRAVE ARMILLARY SPHERE

## HONOURING AN ANCESTOR

David Harber has been building up an international reputation as a sundial maker for 17 years, but until now he was unaware that he was a direct descendant of the great sixteenth century mathematician and dialist John Blagrave. To celebrate this serendipitous link of sundial makers we are using Blagrave's own illustrations to recreate an armillary sphere that follows as faithfully as possible the great man's original design.

The dial is made of solid bronze and the cast elements which form the cradle to the dial have been sculpted to mimic the mythical creatures supporting the sphere, although we decided to give these beasts a slightly less menacing demeanour. These elements were originally hand-sculpted in clay, from which a mould was taken for the final bronze castings.

At the very centre of the sphere, on the gnomon, is a bronze globe with relief land masses depicting the rudimentary understanding of the continents of that time. The land, in burnished bronze, is surrounded by seas that are oxidized to a blue-green verdigris.



Among the other original features are a calibrated scale of time and an azimuth correction scale which allows the dial to be used at any latitude. We have also incorporated a 360° horizon chapter ring which enables the dial to be rotated to true south within the cradle frame.

The Ecliptic ring is engraved with the name and symbol of the twelve signs of the zodiac in their true relative positions. This is also in keeping with the original, although David very much shares John Blagrave's preference of astronomy over astrology.

The hour band is divided into 15 degree one hour intervals and calibrated down to one minute, and all the engraving is in an italic script similar to that in Blagrave's design.

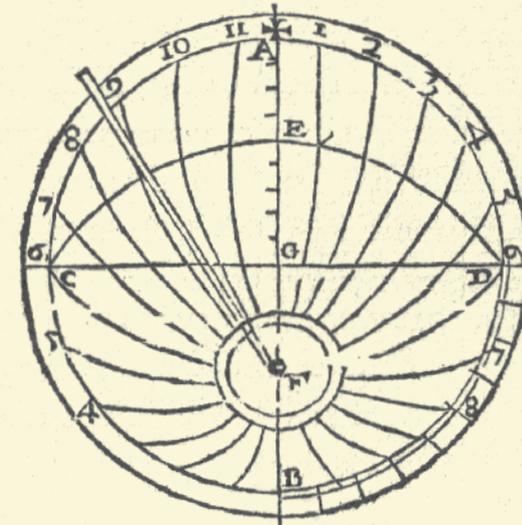
## THE ART OF DYALLING IN TWO PARTS.

The first shewing plainly, and in a manner mechanically to make dyals to all plaines, either Horizontall, Murall, declining, reclining or inclining, with the *theoricke of the Arte.*

The second how to performe the selfe same, in a more artificial kinde, and without vse of Arithmeticke, together with concaue and conuex Dyals, and the inserting of the 12. signes, and the howres of any other country in any dyall, with many other things to the same Art appertaining.

The whole differing much from all that hath beene heretofore written of the same Art by any other, and the greater part wrought by diuerse new conceits of the Author, neuer yet extant, now published.

By IOHN BLAgrave of Reading Gentleman, and Mathematician this yeare, 1609.



AT LONDON,  
Printed by N. O. for Simon Waterston, and are to be sold at his shop in Pauls Church yard, at the signe of the Crowne, 1609.

# JOHN BLAGRAVE

Born 1561 – Died 1611

Born to John and Anne Blagrove of Bulmershe Court near Sonning, John Blagrove was educated at Reading School and St John's College, Oxford from where he left without graduating. Having turned his genius to mathematics, he led a retiring life at Southcote Manor, Reading, where he devoted his time to study and contemplation. He designed and made instruments and sundials including an astrolabe which he described in *The Mathematical Jewel* and his *Familiar Staff*. He was married to Dorothy. His nephew, Daniel Blagrove, to whom he eventually bequeathed his lands at Southcote, was one of the signatories to the death warrant of King Charles I.

## Published mathematical works

Blagrove wanted to show that the mathematical sciences were not mere amusements for scholars and speculative persons but of "general advantage and indispensable in many necessary conveniences of life". This view informs all his best known works.

# PRIVATE LIFE

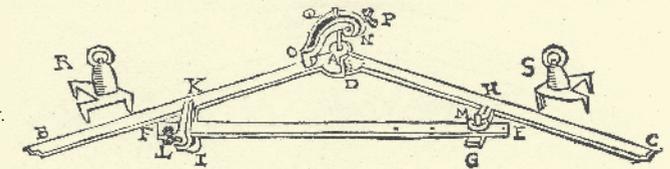
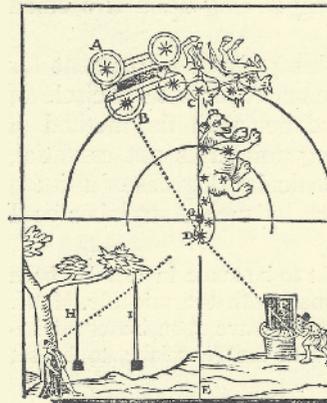
John Blagrove was recognised for the concern he showed for the wellbeing of others. To his local town of Reading he left several legacies including one to enlarge the market place and another which provided the sum of twenty nobles to be competed for by three maid servants of good character and of five years' service under one master and which were to be selected by the three parishes of the town. Lots were cast on Good Friday to select the recipient of the money.

## *The Mathematical Jewel (1585)*

"Showing the making and most excellent use of a singular instrument so called, in that it performeth with wonderful dexterity whatever is to be done either by quadrant, ship, circle, cylinder, ring, dial, horoscope, astrolabe, sphere, globe or any such like heretofore devised."



Below: Blagrove's method of drawing the meridian line in the night by the Pole Star.  
*Art of Dyalling*, 1609, p. 73



Above: Blagrove's 'Instrument of Three Streight Rules, better than any compass to describe any arch with behis center neuer so farre off'  
*Mathematical Jewel*, p. 65

## *Astrolabium Uranicum generale (1596)*

"A necessary and pleasant solace and recreation for navigators in their long journeying."



LONDINI Excudit Josephus Moxon.

## *Baculum. Familiare Catholicon sive Generale (1590)*

"A book of the making and use of a staff newly invented by the author, called the Familiar Staff, as well for that it may be made usually and familiarly to walk with as for it performeth the geometrical mensurations of all altitudes."

Engraved title to J. Palmer's *Mathematical Jewel*, 1658, with portraits of Blagrove and Palmer

## *The Art of Dialling (1609)*

Towards the end of this book Blagrove explains how to draw lines to give the hours in any other place. He gives the following examples as reasons for such multiple dials: "...suppose some silly Papist would be glad here about Reading to have in his dial a device, to shew how the howres passé away at Rome, that understanding what howre the Pope useth to dine, he might bid much good do it him. Or that some dissenting Puritane, would have the like device, that in the middle of his meate he might bid the Devil choke him to ease his stomache."



He was buried in St Lawrence's Church: under his bust is a plaque with this epitaph:

*Here lyes his corpes, which living had a spirit wherein all worthy knowledge did inherit by which with zeale our God he did adore left for maidservants and to feed the poore his virtuous mother came of worthie race a Hungerford, and buried nere this place when God sent death their lives away to call they beloved and died bewayld of all deceased the 13th of August  
Anno Domini MDCXI*

