

Inventory

Acc.10254

Papers of James Ferguson

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1. "Miscellanies by James Ferguson A.D. 1740". Bound volume containing the following:

"The Description and use of a Small Orrery or Copernican Sphere, made by James Ferguson, A.D. 1742", p.1. "The Uses of the forementioned Orrery", p.6. "Astronomical Definitions", p.25.

2. Bound volume containing the following:

"The Description and the Use of the Astronomical Rotula" with "The Astronomical Rotula, Shewing the Days of al the New and Full Moons and Eclipses".

"The Description and Use of the Lunarium" with a Lunarium for 30 years, 1771-1800.

"The Description of the Universal Solar Time-finder" with a Universal Solar Time-finder.

3. Bound volume containing:

John Horsley <u>A short and general account of the most necessary and fundamental principles of Natural Philosophy</u> Revised by John Booth, Glasgow 1743. "The Description and Use of the Copernican Sphere called the Orrery by James Ferguson" (pp.101-114), including drawing and table. "A Plain and Easy Method of Calculating the True Places of the Sun and Moon; with their Conjunctions, Oppositions, and eclipses..." (pp.115-140). "Astronomical Tables for Calculating the True Places of the Sun and Moon; With the exact Time of their Conjunctions, Oppositions and Eclipses From the creation of the World to A.D. 5901" (pp.141-167). Diagram of "The Engine for Raising Water (with a power made) by Fire", with a description of the various parts of the engine.

4. Notebook containing:

"Of the Motions and Orbits of the Planets" with diagrams. "Of the ebbing and flowing of the Sea".

5. Notebook containing:

"Of the Division of Time and Motion" with tables.

6. "The Moon's Motion round Her own Axis demonstrated, in a letter to ***** Esq by James Ferguson 1745/6", with diagrams.

7. Bound volume containing the following:

A Dissertation upon the Phenomena of the Harvest Moon also, the description and Use of a new Four-Wheel'd Orrery an essay upon the Moon's turning round her own axis by James Ferguson, London, 1747. Manuscript notes by Ferguson on the flyleaf. Philosophical Transactions for the months of March and April, 1746, including The Phenomena of Venus, represented in an Orrery made by Mr James Ferguson, agreeable to the Observations of Seignior Bianchini Read Mar 20 1745-6 and printed with alterations, pp.127-146. "The Use of a New Orrery; shewing The Motions of the sun, mercury, venus, earth" and moon: with All the different phenomena resulting from their Motions. Made and described by James Ferguson, Limner in London. M.DCC.XLVII", 1747, with diagrams. "A Description of the In-side of the four-Wheel'd Orrery", with diagram.

"The Astronomical Clock" with diagrams. "The Satellite-Instrument" with diagrams.

"The Equi-areal Machine" with diagrams.

- 8. "Definition of an Orrery made for Dr Stevens by James Ferguson".
- 9. "The use of the Globes from page 260 to page 329 by James Ferguson, 1760". Part of Lectures on Select Subjects in mechanics... London, 1760.
- Bound volume containing Supplement to the Christian's magazine for the Year 1763 <u>Mr Kennedy's System examined, by a Clergyman</u>. <u>Analysis of a course of lectures, on mechanics, Hydrostatics, Pneumatics and Astronomy</u>, read by James Ferguson, London 1761.
 "Astronomical Tables and Precepts, For calculating the true Times of New and Full Moons and Eclipses, From the Creation of the World to A.D. 1800. By James Ferguson, London 1762".
 <u>A Letter to The Rev Mr John Kennedy, In Answer to his Examination of Mr Ferguson's Remarks (Inserted in the Critical Review For May 1763) upon Mr Kennedy's System of Astronomical Chronology, by Mr Ferguson, 1763.</u>
- 11. <u>The Description and Use of A New Machine, called the Mechanical Paradox;</u> <u>invented by James Ferguson FRS</u>, London, 1764.
- 12. Astronomical Tables and Precepts, For Calculating the Times of New and Full Moons, And projecting all the Eclipses, from the Creation of the World to A.D. 7800, by James Ferguson, FRS.
- 13. <u>The Description and Use of the Astronomical Rotula</u>, London 1775, (8 copies).

- 14. <u>Plates illustrating a new edition of Ferguson's Lectures on Mechanics,</u> <u>Hydraulics, Pneumatics, Optics Geography, Astronomy, and Dialing</u> edited and enlarged by David Brewster, Edinburgh, 1805.
- 15. Lecture on heat, labelled 2nd Lecture, n.d.
- 16. Part of a lecture on chemistry, n.d.
- 17. The Theory of Perspective, with a diagram, n.d.
- 18. "Decimall Arithmetic", not in Ferguson's hand, n.d.
- 19. Offprint from Book I of "The Whole Genuine Works of Flavius Josephus', 1818.

DIAGRAMS, DRAWINGS AND ENGRAVINGS

20. Orreries

Engravings (4) of orreries.

21. Rotulas, Luminarium etc

Six items including

"The Astronomical Rotula, Shewing the Moon's Age every Day of the Year, with the Days of all the New and Full Moons, and of all the Solar and Lunar Eclipses, from A.D. 1742, to A.D. 1800, by James Ferguson, FRS.

"The Luminarium" with "The Astronomical Rotula, Shewing the Days of New and Full Moons and Eclipses", on the reverse.

"Jupiter's annual or progressive Motions from A.D. 1769 to A.D. 1801".

22. Dials

"The Dial of the Great Clock in the Cathedral of Exeter, shewing the Hours and Minutes, the diurnal motions of the Sun and Moon round the Earlth, with the Moon's Age and Phases".

"An Erect Dial, declining from the South toward the west by 45 Degrees, in the Latitude of $57\frac{1}{2}$ Degrees North".

A Star Dial

"A Clock showing the Hours and Minutes, the Day of the Month, the Moon's Phases, Age and Southing, with the time of High Water, and the State of the Tide at any time of the Day or Night, by Inspection".

"A Dial shewing the Time of the Day and Azimuth of the Sun".

23. Machinery

A Machine for shewing the Phenomena of Ebbing and Flowing Wells, and of Intermitting & Reciprocating Springs – Drawing.

The Engine for raising Water by Fire – Drawing.

The Front View of Mr Hamilton's great Wheel at Cobham for raising Water – Drawing.

The Hungarian Engine for Raising Water from Mines – Drawings.

The Explanation of the Steam Engine, printed (2 copies).

The Description of Mr Blakey's new invented Fire-Engine, for supplying Towns or Mills with Water.

Plate IX Engraving of Mr Vaulove's curious engine which was made use of for driving the piles of Westminster Bridge. Published in <u>Lectures on select Subjects</u>.

Plate XIII Engraving of The Persian Wheel. Published in <u>Lectures on select</u> <u>Subjects</u>.

4 miscellaneous drawings and engravings.

24. Architecture

Drawings and (5) engravings concerned with architecture and fortifications including:

"A Prospect of Matlock Bath, with the Rocks, and part of the River Derwent, taken from Mr Fletcher's near the Lover's Walk". A Plan of Windsor Castle, 1749. A View of the Bridge of Blenheim.

25. Maps

The North West Coast of Orkney, Surveyed and Navigated by Murdoch Mackenzie, 1750, pub.

Chart containing the greater part of the South Sea to the South of the Line, with the Islands dispersed thro' the same, 1753, pub.

Chart containing the Coasts of California, New Albion, and Russian Discoveries to the North; with the Peninsula of Kamchatka, in Asia, opposite thereto; And Islands, dispersed over the Pacific Ocean, to the North of the Line, 1753.

A Map of the Earth. Upon which are marked the Hours and Minutes of True times of the Entrance and Exit of Venus, in its Passage over the Sun's Disc, June 6th, 1761. Engraving Plate IIII in <u>A Plain Method Of determining the Parallax of Venus...</u>, London, 1761. This copy of the engraving has been coloured.

French Map of the World. With additions by Ferguson showing where the transit of Venus, June 3rd 1769 will be wholly or partially visible or not visible at all.

26. **Optics**

Diagrams (4) concerned with optics, including one printed entitled Optical Cards to be regularly Studied from the first to the last, according to their respective numbers... Projected by John Ryland AM of Northampton and Augumented and Improved by James Ferguson FRS, London, 1773, n.d.

27. Miscellaneous

"The Construction of the Scales of Latitudes, Hours, Chords, Sines, Tangents, Semi-tangents, and Secants".

"A Table shewing the Dimensions of the Solar System. Sun's Parallax 8".65".

Engravings of fetishes

"A Globe carved into the Form of Crosses and Pyramids" – a drawing relating to perspective.