

APPENDIX.

LIST OF PRINTED PAPERS BY G. B. AIRY.

LIST OF BOOKS WRITTEN BY G. B. AIRY.

PRINTED PAPERS BY G. B. AIRY.

WITH the instinct of order which formed one of his chief characteristics Airy carefully preserved a copy of every printed Paper of his own composition. These were regularly bound in large quarto volumes, and they are in themselves a striking proof of his wonderful diligence. The bound volumes are 14 in number, and they occupy a space of 2 ft. 6 in. on a shelf. They contain 518 Papers, a list of which is appended, and they form such an important part of his life's work, that his biography would be very incomplete without a reference to them.

He was very careful in selecting the channels for the publication of his Papers. Most of the early Papers were published in the Transactions of the Cambridge Philosophical Society, but several of the most important, such as his Paper "On an inequality of long period in the motions of the Earth and Venus," were published in the Philosophical Transactions of the Royal Society, and others such as the articles on "The Figure of the Earth," "Gravitation," "Tides and Waves," &c., were published in Encyclopædias. After his removal to Greenwich nearly all his Papers on scientific subjects (except astronomy), such as Tides, Magnetism, Correction of the Compass, &c., &c., were communicated to the Royal Society, and were published in the Philosophical Transactions. But everything astronomical was reserved for the Royal Astronomical Society. His connection with that Society was very close: he had joined it in his earliest days (the date of his election was May 9th, 1828), and he regarded it as the proper medium for the discussion of current astronomical questions, and for recording astronomical progress. He was unremitting in his attendance at the Monthly Meetings of the Society, and was several times President. In the Memoirs of the Society 35 of his Papers are printed, and in addition 129 Papers in the Monthly Notices. In fact a meeting of the Society rarely

passed without some communication from him, and such was his wealth of matter that sometimes he would communicate as many as 3 Papers on a single evening. For the publication of several short mathematical Papers, and especially for correspondence on disputed points of mathematical investigation, he chose as his vehicle the Philosophical Magazine, to which he contributed 32 Papers. Investigations of a more popular character he published in the Athenæum, which he also used as a vehicle for his replies to attacks on his work, or on the Establishment which he conducted: in all he made 55 communications to that Newspaper. To various Societies, such as the Institution of Civil Engineers, the British Association, the Royal Institution, &c., he presented Papers or made communications on subjects specially suited to each; and in like manner to various Newspapers: there were 58 Papers in this category. In so long an official life there would naturally be a great number of Official Reports, Parliamentary Returns, &c., and these, with other miscellaneous Papers printed for particular objects and for a limited circulation, amounted in all to 141. Under this head come his Annual Reports to the Board of Visitors, which in themselves contain an extremely full and accurate history of the Observatory during his tenure of office. There are 46 of these Reports, and they would of themselves form a large volume of about 740 pages.



The following summary of his Printed Papers shews the manner in which they were distributed :

# SUMMARY OF PRINTED PAPERS BY G. B. AIRY.

	Number of Papers.
In the Transactions of the Cambridge Philosophical Society	3
In the Philosophical Transactions of the Royal Society . . . . .	2
In the Proceedings of the Royal Society . . . . .	3
In the Memoirs of the Royal Astronomical Society . . . . .	12
In the Monthly Notices of the Royal Astronomical Society . . . . .	3
In the Philosophical Magazine and Journal . . . . .	5
In the Athenæum . . . . .	1
In Encyclopædias, and in various Newspapers and Transactions . . . . .	5
In Official Reports, Addresses, Parliamentary Returns, Evidence before Committées, Lectures, Letters, Sundry Treatises, and Papers . . . . .	1
Total . . . . .	5

Date when read or published.	Title of Paper.	Where published.
✓1828 Feb. 26	Address to the Members of the Senate, on an Improvement in the Position of the Plumian Professor.	
✓1828 Nov. 24	On the Longitude of the Cambridge Ob- servatory.	Camb. Phil. Soc.
✓1829 Nov. 13	On a method of determining the Mass of the Moon from Transit Observations of Venus near her inferior conjunction.	Astr. Soc. (Memoirs.)
✓1829 Nov. 16	On a Correction requisite to be applied to the Length of a Pendulum consisting of a Ball suspended by a fine Wire.	Camb. Phil. Soc.
✓1829 Dec. 14	On certain Conditions under which a Perpetual Motion is possible.	Camb. Phil. Soc.
✓1830 Aug. 17	Figure of the Earth.	Encycl. Metrop.
✓1831 Feb. 21	On the Nature of the Light in the Two Rays produced by the Double Refraction of Quartz.	Camb. Phil. Soc.
✓1831 Apr. 18	Addition to the above Paper.	Camb. Phil. Soc.
<i>in the already</i> - 1831 Nov. 14	On a remarkable Modification of Newton's Rings.	Camb. Phil. Soc.
✓1831 Nov. 24	On an inequality of long period in the motions of the Earth and Venus.	Phil. Trans.
✓1832 Jan. 2	Translation of Encke's Dissertation (on Encke's Comet) contained in Nos. 210 and 211 of the Astronomische Nach- richten.	
✓1832 Mar. 5	On a new Analyzer, and its use in Experi- ments of Polarization.	Camb. Phil. Soc.
✓1832 Mar. 19	On the Phænomena of Newton's Rings when formed between two transparent Substances of different refractive Powers.	Camb. Phil. Soc.
✓1832 May 2	Report on the Progress of Astronomy during the present century.	Trans. Brit. Ass.
✓1832 Oct.	Report of the Syndicate of the Cambridge Observatory.	
✓1833 Feb. 2	Remarks on Mr Potter's Experiment on Interference.	Phil. Mag.
✓1833 Apr. 12	On the Mass of Jupiter, as determined from the Observation of Elongations of the Fourth Satellite.	R. Astr. Soc. (Memoirs.)
✓1833	Syllabus of a Course of Experimental Lectures.	
<i>in these already</i> - 1833 May 7	On the Calculation of Newton's Experi- ments on Diffraction.	Camb. Phil. Soc.



Date when read or published.	Title of Paper.	Where published.
✓1833 May 7	Remarks on Sir David Brewster's Paper "On the Absorption of Specific Rays" &c.	Phil. Mag.
✓1833 May 16	Results of the Repetition of Mr Potter's Experiment of interposing a Prism in the Path of Interfering Light.	Phil. Mag.
✓1833 May	On a supposed black bar formed by Dif- fraction.	Phil. Mag.
✓1833 June 20	Report on Mr Barlow's Fluid-Lens Tele- scope.	R. Soc. (Proc.)
✓1834 Mar. 14	Continuation of Researches into the Value of the Mass of Jupiter, by observation of the Elongations of the Fourth Satellite.	R. Astr. Soc. (Memoirs.)
✓1834 Apr. 14	On the Latitude of Cambridge Obser- vatory.	Camb. Phil. Soc.
✓1834 June	Report of the Syndicate of the Cambridge Observatory.	
✓1834 June 13	On the Position of the Ecliptic, as inferred from Transit and Circle Observations made at Cambridge Observatory in the year 1833.	R. Astr. Soc. (Memoirs.)
✓1834 June 13	Observations of the Solar Eclipse of July 16th, 1833, made at Cambridge Observa- tory, and Calculations of the Observa- tions.	R. Astr. Soc. (Memoirs.)
✓1834 Nov. 24	On the Diffraction of an Object-Glass with Circular Aperture.	Camb. Phil. Soc.
✓1834 Dec. 3	On the Calculation of the Perturbations of the Small Planets and the Comets of short period.	Naut. Alm. (1837, App.)
✓1835 May 8	Continuation of Researches into the Value of Jupiter's Mass.	R. Astr. Soc. (Memoirs.)
✓1835 June	Report of the Syndicate of the Cambridge Observatory.	
✓1835 June 12	On the Position of the Ecliptic, as inferred from Observations with the Cambridge Transit and Mural Circle, made in the year 1834.	R. Astr. Soc. (Memoirs.)
✓1835 June 12	On the Time of Rotation of Jupiter.	R. Astr. Soc. (Memoirs.)
✓1836 Feb. 12	Speech on delivering the Medal of the R. Astr. Soc. to Sir John Herschel.	R. Astr. Soc. (Proc.)
✓1836 June 4	Report of the Astronomer Royal to the Board of Visitors.	

Date when read or published.	Title of Paper.	Where published.
✓1836 June 9	Report upon a Letter (on a Systematic Course of Magnetic Observations) addressed by M. le Baron de Humboldt to His Royal Highness the President of the Royal Society (by S. Hunter Christie and G. B. Airy).	R. Soc. (Proc.)
✓1837 Jan. 13	Continuation of Researches into the Value of Jupiter's Mass.	R. Astr. Soc. (Memoirs.)
✓1837 Feb. 10	Speech on delivering the Medal of the R. Astr. Soc. to Professor Rosenberger.	R. Astr. Soc. (Proc.)
✓1837 Mar. 10	Results of the Observations of the Sun, Moon, and Planets, made at Cambridge Observatory in the years 1833, 1834, and 1835.	R. Astr. Soc. (Memoirs.)
✓1837 May 12	On the Position of the Ecliptic, as inferred from Observations with the Cambridge Transit and Mural Circle, made in the year 1835.	R. Astr. Soc. (Memoirs.)
1837 June 3	Report of the Astronomer Royal to the Board of Visitors.	
1837 Sept. 9	Address delivered in the Town Hall of Neath.	
1837 Nov. 10	On the Parallax of $\alpha$ Lyræ.	R. Astr. Soc. (Memoirs.)
1838 Feb. 10	Address to the Earl of Burlington on Religious Examination in the University of London.	
1838 Mar. 26	On the Intensity of Light in the neighbourhood of a Caustic.	Camb. Phil. Soc.
1838 June 2	Report of the Astronomer Royal to the Board of Visitors.	
1838 Dec. 14	A Catalogue of 726 Stars, deduced from the Observations made at the Cambridge Observatory, from 1828 to 1835; reduced to January 1, 1830.	R. Astr. Soc. (Memoirs.)
1839 Apr. 25	Account of Experiments on Iron-built Ships, instituted for the purpose of discovering a correction for the deviation of the Compass produced by the iron of the Ships.	Phil. Trans.
1839 June 1	Report of the Astronomer Royal to the Board of Visitors.	
1839 Nov. 8	On the Determination of the Orbits of Comets, from Observations.	R. Astr. Soc. (Memoirs.)