

THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Report on the papers of
FRANCIS JOHN WELSH WHIPPLE (1876-1943)
meteorologist
and on some correspondence of
JOHN WELSH, FRS (1824-1859)

deposited in the University Library, Cambridge

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THE ROYAL SOCIETY

THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Joint Committee on Scientific and Technological Records.

CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

Papers of

Francis John Welsh Whipple

(1876 - 1943)

Listed by: Jeannine Alton

Harriot Weiskittel

Deposited in the University Library, Cambridge 1975

Description of the collection.

The papers were received from Mr. R.T.P. Whipple, only son of F.J.W. Whipple.

They consist of observations, notes and drafts, with related correspondence, and have been arranged in chronological order where this was known.

The collection also includes a small amount of correspondence of John Welsh, FRS, 1824 - 59, Superintendent of Kew Observatory 1852 - 59, and godfather of G.M. Whipple 1842 - 93 (F.J.W. Whipple's father), also Superintendent of Kew 1876 - 93. This appears as Item 21.

All items are manuscript. Titles and descriptions in inverted commas are those which appear on the manuscripts or folders.

Summary of the career of F.J.W. Whipple

b. 1876

- | | |
|-----------|---|
| 1897 | educ. Merchant Taylors' School; Trinity College, Cambridge.
Second Wrangler. |
| 1912 - 14 | Mathematics master, Merchant Taylors' School. |
| 1914 | Superintendent of Instruments, Meteorological Office. |
| 1925 - 39 | Superintendent, Kew Observatory |
| 1936 - 38 | President, Royal Meteorological Society. |

Handlist of the papers.

1. Obituary notice of Francis John Welsh Whipple (reprinted from Proc. Phys. Soc. Vol. LV, 1943)
2. Patent No. 19055, 20 August 1912, 'Improvements in indicators'. 1912
3. Folder of notes, diagrams and drafts on 'Mechanism of Cyclones'. 1917
4. Corresp. with L.F. Richardson and Gilbert D. West on Thermal transpiration. 1919 - 22

5. Folder, 'Meteorological Office - Articles on Ice Pinnacles & Ice Crystals'
Notes, diagrams & drafts for articles; correspondence 1922 - 24 on structure of ice crystals with Sir William Bragg. 1922 - 24
6. Notes & corresp. 'on rainbow colours' 1926

Notes & corresp. on 'dissipation coefficient for small ions in air free from Aitken nuclei' 1940
7. Notebook, 'Cloud Observations at Kew Observatory 1929', and Ms. 'Cloud Diagrams & Comparisons with Cloud Photographs', dated 17/7/29. 1929
8. Folder of notes on 'The Colour & spectrum of lightning', and 'The intensity of sky-radiation during twilight' by Whipple and others. 1929
9. Folder, 'Effect of Grass on Earth Temperature at Kew', with related corresp. 1931 - 38
10. Folder, 'Dept. of Scientific and Industrial Research - Request for information re Atmospheric Pollution'. Notes & observations, Ms. 'The part played by foreign particles in the production of fog', corresp. with Sir Frank Smith. 1937
11. Folder of seismological observations, corresp. on equipment. 1939
12. Corresp. & notes on mathematics with T.W. Chaundy. 1943

13 - 20 Misc. undated drafts & notes.

13. 'A modification of Sommerfeld's Methods'.
14. 'A note on the analysis of variation by the use of orthogonal polynomials'.
15. 'Law of Approach to Geostrophic Wind. Extended Investigation. Rough Ms.' Notes, observations & drafts on radiation, turbulence, eddy viscosity etc. ?1920 - 23
16. 'On the Approach of the Centroid to the Theory of Regular Polygons', and other mathematical notes.
17. Misc. notes & drafts on haloes and arcs.

18 - 20 Work on Meteors.

18. 'Siberian Meteor Notes + Taylor's Wave Theory'

19. 'On the Inaudibility of Meteors travelling at Great Heights'.
 20. Drafts for papers on meteors.

21 Correspondence of John Welsh.

Contents of the envelope:

3 letters to John Welsh from John Allan Broun, FRS, 1851 (from Paris), 1853, 1859 (from Trevandrum Observatory, Travancore).

* J.A. Broun, FRS, 1817 - 79, was the first Director (1842 - 49) of Mackerstoun Observatory, Kelso, founded by Sir Thomas Makdougall-Brisbane (see below). Broun worked with Welsh in Edinburgh in 1852, and was appointed Director of Trevandrum Magnetic Observatory, Travancore, where he worked 1852 - 65.

13 letters from John Welsh to his mother, 1844, 1857 - 58, from Scotland & the Western Islands. (The later letters refer to the lung infection from which he died in 1859).

1 letter & sheet of observations, 1861, from Sir Thomas Makdougall-Brisbane.

* Sir Thomas Makdougall-Brisbane, FRS, 1773 - 1860, founded the Mackerstoun Observatory 1841, and was President of the Royal Society of Edinburgh 1833 - 60.

1 letter from Thomas Blakiston, 1857, from Hudson's Bay.

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