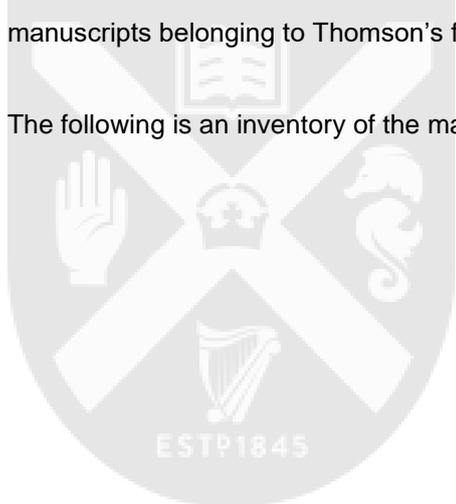


MS 13 Thomson Manuscripts

About the collection:

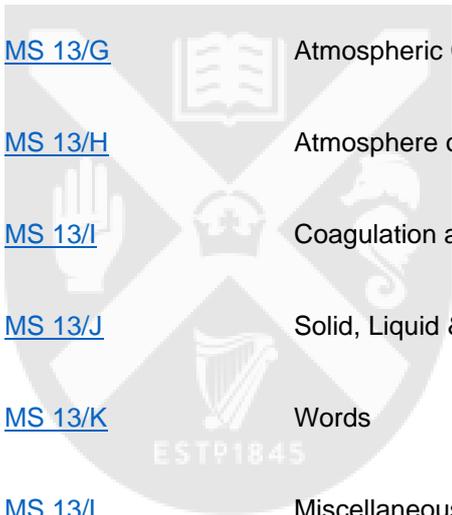
Collection of scientific papers and notebooks, memoranda, lectures, correspondence etc of James Thomson (1822-1892), Professor of Engineering at Queen's College, Belfast, 1857-1873. Various topics are highlighted in the collection reflecting Professor Thomson's wide range of research interests. These include such areas as fluid motion, the formation of river bars, ventilation, atmospheric circulation, the atmosphere of Jupiter and the freezing and melting of solid, liquid and gaseous states of matter, which he investigated with his Belfast colleague, Thomas Andrews (1813-85). The collection also includes many manuscript drafts of lectures and scientific papers, printed offprints of papers by Thomson and other contemporaries, newspapers and journals, pamphlets and patent specifications. There is also a large quantity of letters to and from Thomson with about 50 correspondents. These include his brother, the eminent physicist Lord Kelvin, Michael Faraday, James Clerk Maxwell, P.G. Tait, J.J. Murphy, Thomas Andrews, Galbraith, G.G. Stokes, Sir R. Ball, W.J.M. Rankine and others. Most of this material is of a technical nature. The collection also contains some manuscripts belonging to Thomson's father, James Thomson, senior (1786-1849).

The following is an inventory of the manuscripts in the Thomson Collection.



QUEEN'S
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MS 13	Table of contents
MS 13/A	Manuscript Books
MS 13/B	Relating to Professorships
MS 13/C	Lectures
MS 13/D	Fluid Motion
MS 13/E	Formation of River-bars
MS 13/F	Ventilation
MS 13/G	Atmospheric Circulation
MS 13/H	Atmosphere of Jupiter
MS 13/I	Coagulation and Liquefaction
MS 13/J	Solid, Liquid & Gaseous States
MS 13/K	Words
MS 13/L	Miscellaneous papers
MS 13/M	Correspondence
MS 13/N	Manuscripts of James Thomson, Senior



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MS 13/A

Manuscript Books

- MS 13/A/1** 07/04/1937 **Jacobus Thomson, Bench 3**
Book in wrappers of newspaper, on which is a date Apr 7, 1837, containing exercises in geometry, worked by “Jacobus Thomson, Bench 3”, at Glasgow College. (200 x 130 mm).
- MS 13/A/2** 13/05/1837 **No. 4, James Thomson, Jr College Glasgow May 13, 1837**
With marbled covers, inside cover “Note-book. No. 4, James Thomson, Jr College Glasgow May 13, 1837”, containing exercises in algebra & trigonometry; followed with later notes on the cost of engines. (202 x 128 mm).
- MS 13/A/3** 15/11/1838 **Solutions of the Questions proposed to the students of the Senior Mathematical Class in April, 1838, as the subject of a Vacation Exercise. Glasgow College November 15th 1838**
Book with stiff marbled covers. “Solutions of the Questions proposed to the students of the Senior mathematical Class in April, 1838, as the subject of a Vacation Exercise. Glasgow College November 15th 1838”. This is followed by a note in the hand of Prof Jas Thomson, Sr. – “This exercise was written by James Thomson Jr, Glasg. Coll. And gained the prize, decided by the Rev. Dr. Forbes, Minister of St Paul’s, Glasgow. J. Thomson, Prof of Math.” Pasted inside the cover, the letter from Dr. Forbes to Prof Thomson conveying the award. (255 x 200 mm).
- MS 13/A/4** 1841 **James Thomson. Jr, 1841**
Note-book, marbled covers, “James Thomson. Jr, 1841” inside cover, on first page, “Note-Book. No.2, no other class note-book. Civil Engineering Class Notes”. Some entries in an early form of Pitman’s Shorthand. Stuck in at the end, a printed Syllabus of lectures on Civil Engineering & mechanics in Glasgow University, Session 1846-47. (205 x 125 mm).
- MS 13/A/5** May 1942 **Essay on Overshot Water Wheels, James Thomson May 1842**
In paper covers, “Essay on Overshot water wheels, James Thomson May 1942”. (255 x 210 mm)
- MS 13/A/6** 1874 **Note-Book. No. 3**
Small note-book, marbled covers. Marked inside cover “Note-Book. No. 3”. The Latter part of the book contains notes on hydraulics written “before 1847”, at the end in red ink, is “Postscript, March 1874” in which comments are made on the progress of the writer’s ideas on flow of water. (155 x 98 mm).

- MS 13/A/7** 1847 **Natural Philosophy 1847**
Small black note-book "Natural Philosophy 1847", notes of a course of lectures (given by Wm Thomson?). (160 x 100 mm).
- MS 13/A/8** n.d. **Note-book, No. W.W. 1**
Book with limp marbled covers, "Note-book, No. W.W. 1. (195 x 165 mm).
- MS 13/A/9** 1849 **Note Book, No. 4, intended to contain chiefly Memorandums likely to be useful to me on Practical Subjects and on Scientific Subjects applicable to the Arts. James Thomson, Nov. 1849**
Note-book with black covers. (200 x 127 mm).
- MS 13/A/10** 04/03/1852 **Calculation Book, No. 2, James Thomson**
Book with black covers. Date at beginning, March 4, 1852. Calculations relative to vortex-turbines. (182 x 115 mm).
- MS 13/1/11** n.d. **Applications of the Principles of States**
Note-book with stiff marbled covers. "Applications of the Principles of States", contains miscellaneous notes, some in shorthand. (184 x 115 mm).
- MS 13/A/12** 01/1875 **Note-book. No. 5, intended to contain Notes on Water Works, James Thomson, April 24, 1856. also Notes on House Arrangements begun chiefly in reference to W. Thomson's intended house at Largs, January 1875**
Book with stiff marbled covers. (220 x 180 mm).
- MS 13/A/13** c. 1872 **Untitled**
Note-book. (200 x 165 mm). Contains notes on thermodynamics & on ocean currents. Inserted is a pencilled letter from Wm Thomson on the latter subject, dated 22 Oct 1872.
- MS 13/A/14** 09/1848 **Motive Power of Heat & Air Engines**
Set of three books, marked A B C (255 x 205 mm), "Motive Power of Heat & Air Engines". On outside of cover of A label inscribed – "This book contains at page 58, under date May 1848, my original manuscript investigation of the amount of the lowering of the Freezing Point of Water by pressure James Thomson, Sept 1863".

MS 13/A/15 n.d.

Untitled

Foolscap engineering notebook. (380 x 250 mm) Worn marbled boards over quarter calf, back strip largely perished and missing. 128pp with c 40 blank pages and miscellaneous jottings, some in the hand of other family members. Throughout the book, Thomson uses a mixture of drawings and graphs combined with text and mathematical calculations, all divided into headed sections. Mainly pen, with some pencil.



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MS 13/B

Papers Relating to Professorships

MS 13/B/1 1855 – 1858 **Queen’s University Papers Testimonials & Applications for Examinership**
Packet inscribed “Queen’s University Papers Testimonials & Applications for Examinership” containing the following:

- a. 04/07/1855 Letters
James Thomson to Robert Ball, 4 July 1855
- b. 04/07/1856 Letters
James Thomson to Robert Ball, 4 July 1856
- c. 03/07/1858 Letters
James Thomson to G. Johnstone Stoney, 3 July 1858
- d. n.d. Testimonials
Printed copy of testimonials

MS 13/B/2 1857-1880 **Envelope**
Envelope with list of contents inscribed:

- a. 22/12/1857 Commission of Her Majesty Queen Victoria appointing me to the Professorship in Belfast
- b. 30/12/1857 Letter
J.A. Larcom to James Thomson relating to the above.
- c. 24/01/1862 Letter
J.A. Larcom to President, Queen’s College, Galway about pensions. Copy.
- d. [c.12/1857] Note as to my Commission from Her Majesty for Professorship in Glasgow
- e. 06/09/1880 Letter
Elizabeth Thomson to James Coutts, relating to amount of pension, and memorandum of dates & income. (Included with these papers, but not included on list in envelope.

MS 13/B/3 n.d. **De Ratione Incolimitatem Periculumre Aestimandi Quod Ad Structurarum Usum Machinarumque Attinet**
“Induction dissertation, University of Glasgow”, Prof. Nesbitt put it into Latin for me”

Four books containing notes for college lectures:

- | | | |
|------------------|-----------|--|
| MS 13/C/1 | 1858 | Queen's College Belfast, Civil engineering Class 1858
Green covers, inside front cover "Queen's College Belfast, Civil engineering Class 1858". (220 x 185 mm) |
| MS 13/C/2 | 1861-1864 | (Surv. & mapping 1858), 2nd Year. Lecture & Practice courses, From 1861-2 forward, 1862-3, 1863-4
Black covers. (220 x 190 mm). |
| MS 13/C/3 | c.1864 | Memoranda of 1st Year Course from 1863-4 forward
Red mottled covers, on first blank leave "Memoranda of 1 st Year Course from 1863-4 forward". (227 x 178 mm). |
| MS 13/C/4 | c.1864 | Memoranda of 3rd Year Lecture & Practice Courses from 1862-3 Forward
Similar to MS 13/3/4 |
- Notes for lectures on elementary mechanics:
- | | | |
|-------------------|------------|--|
| MS 13/C/5 | 1877 | Simplified Proof of the Parallelogram of Forces
Fasc. pp 15 (3 blank). |
| MS 13/C/6 | 27/11/1888 | Untitled
Fasc. pp 27 (3 blank) 27 Nov 1888 |
| MS 13/C/7 | 18/12/1888 | Untitled
Fasc. pp 17 (12 blank) 18 Dec 1888 |
| MS 13/C/8 | n.d. | Notes for Introductory Lecture or Advice to Students entering my Practice Classes
Pp 4 (one blank). |
| MS 13/C/9 | c.Jun 1870 | Notes for Contemplated Lectures to Working Classes. Perhaps Two, Three or Four Lectures for May or June 1870
Pp 8 (one blank). |
| MS 13/C/10 | 02/10/1873 | Copy made by John Stewart of Lecture-Notes on Architecture as a Fine Art
Pp 48 (2 blank). |

MS 13/D

Papers Relating to Fluid Motion

- MS 13/D/1** 07/1868 **New proposed pump, July 1868**
Jet pump. pp 19
- MS 13/D/2/A** 03/1876 **Vena Contacta, W.J. and J.T. in Glasgow Phil Society, Feb and March 1876**
Off print with manuscript notes, attached to fascicle of further notes, pp 9 (3 blank).
- MS 13/D/2/B** 19/09/1878 **Remarks as to Question of Validity of Prof Purser's Reasoning on the Hydraulic Theorems for Similar Flows**
Letter, John Purser to J.T., 19 Sep 1878, accompanying notes on flow through notches, pp 4 and pp 3 of "Remarks as to Question of Validity of Prof Purser's Reasoning on the Hydraulic Theorems for Similar Flows"
- MS 13/D/3** n.d. **Theory of the Flow of Water through Orifices Similar in Form & Similarly Situated Relatively to the Water Surface**
Fasc. (blue paper). Pp 13
- MS 13/D/4** 03/1889 **Water Orifice notes**
Separate copy of Brit Ass. Paper "on the Flowing water through orifices", 1876, containing many notes & corrections in manuscript. Attached to this "Lecture notes on flow of water through orifices", Date March 1889. (pp 12, 6 blank).
- MS 13/D/5** [1879] **Bundle Connected with Paper by John Perry**
- a. 15/03/1879 Letter
W.E. Ayrton to James Thomson. Sent with John Perry's manuscript
- b. n.d. Manuscript
John Perry on "Flow of liquid" pp 21
- c. 25/09/1879 Letter
W.E. Ayrton to James Thomson 25 Sep (1879) enquiring about the MS 13/D/5/b
- d. n.d. Fasc.
"Notes on Mr Perry's paper on Flow of liquid" pp 7
- MS 13/D/6** 14/02/1885 **Flow Through Similar Notches with Other Similarities & Proportionalities (as usual J.T.)**
Pp 7, (one blank).

MS 13/D/5 n.d. **On the Flow of Water Through Rectangular Gauge-Notches in Vertical Thin Plates**
Fasc. Blue paper, pp 27.

MS 13/E Formation of Bars

Package inscribed in blue pencil, large writing "Package for Collection of Progressive Notes and Allied Papers, River Outfall Bars, Movement of Sands & Shingles et cetera similia." Containing:

MS 13/E/1 07/1885 **On Bars, Notes Begun in Lalla Rookh near Cowes, July 1885**
Fasc. Enclosed.

- a. n.d. Single sheet of pencilled memoranda
- b. n.d. Note
Note in handwriting of W.T. scribbled on back of envelope addressed to Mrs Jas Thomson.
- c. n.d. Considerations on the Origin & Perpetuation of Bars at the Seaward Limits of Rivers & Tidal Estuaries
3 Pages.

MS 13/E/2 10/1887 **Printer Letter from A.T. Atchison, Socy Brit. Ass.**
Intimating Appointment of Committee to Examine the Subject, Oct. 1887

MS 13/E/3/A 16/07/1889 **Notes for New Theory of the Mode of Formation of Bars at the Sea Outlets of Rivers**

MS 13/E/3/B 25/09/1889 **Further notes on Bars**
Written by B.J. from father's dictation. Glasgow. Pp 4.

MS 13/E/4 07/12/1889 **Interim Notes on Hydrodynamic Action in Waves Breaking on a Shelving Beach, and on the Shifting of Gravel, Shingle and Larger Stones by the Waves**
Pp 5.

MS 13/F

Ventilation

MS 13/F/1

The New College at Glasgow

- a. n.d. Notes of Useful Principles
Pp 3.
- b. 30/09/1864 Letter
Copy of letter from W.T. With additional page in W.T.'s hand
- c. n.d. Reply
Unsigned, in hand of Mrs E. Thomson
- d. c.10/1864 Memo
Memo of information sent in letter of E. Thomson to Wm. Thomson from
Dublin about Oct 1864
- e. 13/12/1864 Letter
W.T. to James Thomson
- f. 15/12/1864 Notes
Notes of answer sent to W.T

MS 13/F/2

Rosemary Street Church

- a. 09/06/1865 Letter
John Campbell to James Thomson.
- b. 28/12/1865 Letter
Robert Patterson to James Thomson.
- c. 06/01/1866 Note of opinion on question of ventilation of meeting-house of 1st
Congregation, Rosemary Street, to the Sub-committee on that matter
Pp 6
- d. 07/05/1866 Letter
G.K. Smith to J.T

MS 13/F/3

Belfast Museum

- a. 15/07/1868 Letter
A.O'D. Taylor to James Thomson.
- b. N.d. Notes on Dr Templeton's Proposed Ventilation for the Museum Belfast

MS 13/F/4

n.d.

R.A. Irish, Mathematical Class-room

Working drawings with notes of "Ventilation constructed ... about 1870 or
1871"

MS 13/F/5 30/12/1877 **Bute Hall, Glasgow University**
Copy of letter James Thomson to W.T. describing proposed new system.

MS 13/G **Atmospheric Circulation**

MS 13/G/1 06/04/1859 **On the Reason Why the Equatorial Rising Belt Keeps So Close to the Equator at all Seasons of the Year**
Single leaflet.

MS 13/G/2 n.d. **Atmos. Circ. Notes & Queries**
Fasc. pp 12.

MS 13/G/3 n.d. **Claim to Priority**
Written on the backs of leaflets of the B.N.H.P.S. pp 3

MS 13/G/4 03/02/1891 **Progressive Fascicle of Notes & Papers, Old & New for Use In Preparation of my Intended Royal Society Paper on Atmospheric Circulation, J.T. Feb 3. 1891**
Fasc. pp11.

MS 13/G/5 21/10/1891 **Primary Date, 21 Oct 1891**
Fasc. pp 4.

MS 13/G/6 c.12/1891 **Title for a Proposed Essay or Paper Either for Own Consideration or Perhaps for Publication in Some Way or Third Paper – Date about Dec 1891**
Fasc. Pp22

MS 13/G/7 19/12/1891 **Notes to be Spoken about to W.T.**
Fasc. pp 12

MS 13/G/8 06/01/1892 **Primary Date**
Fasc. pp 9

MS 13/G/9 07/01/1892 **From Father's Dictation**
Fasc. pp 8.

- MS 13/G/10** 07/01/1892 **2nd Form, 7th Jan 1892 & Srd Form 8th Jan 1892**
Fasc. pp 26
- MS 13/G/11** 05/1892 **Primary Date**
Fasc. pp 6
- MS 13/G/12** 17/04/1892 **Date 17 Ap 1892**
Fasc. pp 4

MS 13/H Atmosphere of Jupiter

In wrapper addressed to Miss Thomson.

- MS 13/H/1** 08/09/1891 **Letter in pencil**
James Thomson. to W.T.
- a. 21/09/1891 Letter
Large sheet, in pencilled large handwriting. James Thomson to W.T.
- b. 03/10/1891 Letter
W.T. to James Thomson
- c. 03/10/1891 Letter with Covering Letter
James Thomson to W.T. Pencil. 2 & 3 Oct 1891 with covering letter J.T. Junior to W.T.

MS 13/H/2 Jupiter, Also Sun

Blue Envelope

- a. n.d. Notes Out of Ball's Story of the Heavens
Fasc. pp 5
- b. n.d. Sheet of rough paper with pencilled notes in large writing
- c. 11/10/1891 Covering Letter
J.T. Junior to W.T.

MS 13/H/3

- a. n.d. **'Speculative Suggestion ...'**
Double sheet.
- b. n.d. **Rough Notes of Calculations**
Double sheet.

MS 13/H/4 1860 **De la Rue's Pocket Diary for 1860**
Containing information about Jupiter

MS 13/I **Coagulation and Liquefaction**

MS 13/I/1 18/04/1866 **On the Effect of Pressure in Lowering the Freezing Point of Water, and on the Plasticity of Ice**
Report of paper read to B.N.H.P.S. on the 2 Dec 1857 with historical memorandum by James Thomson dated April 1866

MS 13/I/2 12/1866 **On the freezing of water at temperatures lower than 320 F**
Offprint of paper by A.H. Curtis, in *Phil mag*, Dec 1866. with criticisms of James Thomson.

MS 13/I/3 31/08/1890 **Scribble memo**
Fasc. pp 12.

MS 13/J **Solid, Liquid and Gaseous States**

MS 13/J/1 10/05/1869 **Notes and Queries on Gases, Liquid, Fluids**
Fasc. Pp12.

MS 13/J/2 05/06/1871 **Notes on Solid and Gaseous States of Matter**
Fasc. pp 9. One blank.

MS 13/J/3 08/07/1871 **Notes & Queries on Boiling & Superheating in Liquids, or on Boiling & on Conditions in Liquids Brought Past their Boiling Point Without Gasification**
Fasc. pp 10. One blank.

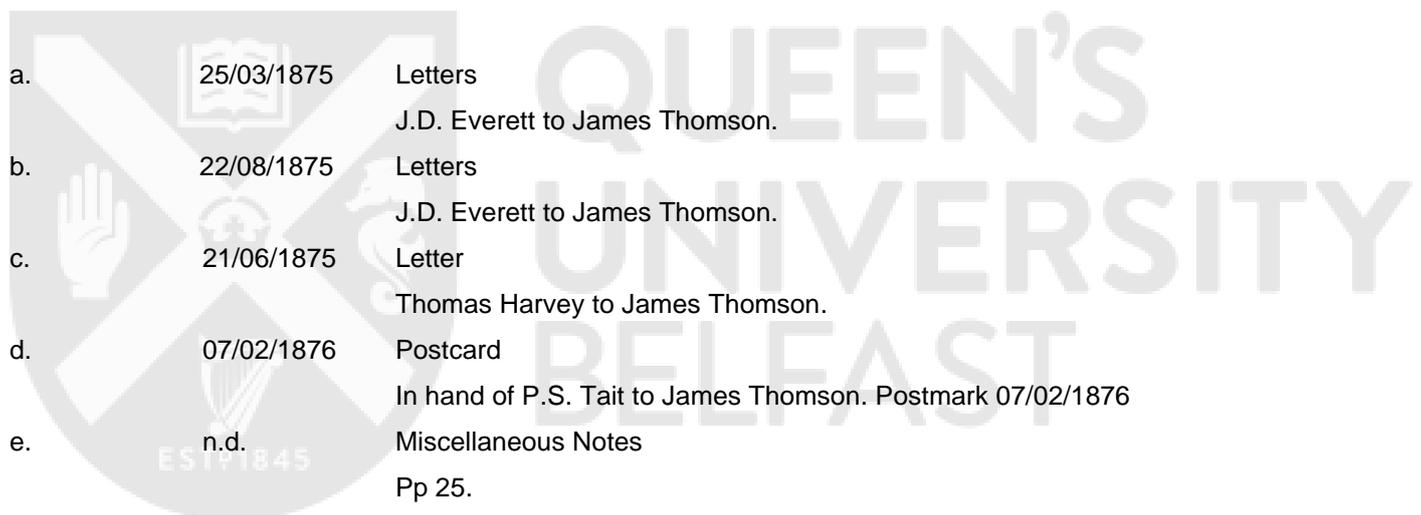
MS 13/J/04 15/07/1871 **Notes on Boiling & Allied Phenomena**
Fasc. pp 7.

MS 13/J/05 25/05/1873 **Fascicle of Papers Containing Progressive Notes on Solid, Liquid & Gaseous States**
Fasc. pp 15

MS 13/K **Notes on Words**

Large envelope marked 'Notes on Words' containing:

MS 13/K/1 **Notes on Nomenclature in Reference to Improvements in Expression**
Bundle of manuscripts.

- 
- a. 25/03/1875 Letters
J.D. Everett to James Thomson.
- b. 22/08/1875 Letters
J.D. Everett to James Thomson.
- c. 21/06/1875 Letter
Thomas Harvey to James Thomson.
- d. 07/02/1876 Postcard
In hand of P.S. Tait to James Thomson. Postmark 07/02/1876
- e. n.d. Miscellaneous Notes
Pp 25.

MS 13/K/2 **Notes as to new words, and new or modified verbal expressions, either introduced by myself or in which I may have taken special interest. J.T.**
Manuscripts.

- a. 20/06/1889 Letter
Max Müller to James Thomson.
- b. N.d. Miscellaneous notes
Partly historical. pp 17

MS 13/K/3 05/1887 **Draft notes or scribbled memorandums for a collection of information regarding new words, chiefly own new words, with a view to the sending of proper information on the subject to editors of dictionaries. This draft is begun in May 1887 in consequence of a suggestion from MHT**

Stuck inside is an examination paper of 5th April 1881, in which “apocentric force” is used. Pp 19,

MS 13/K/4 08/1888 **Notes & Queries for reference to W.T. Aug 1888**
Double sheet.

MS 13/K/5 n.d. **Words for Which Deviations Are Wanted**
Pp 3

MS 13/K/6 n.d. **Long Words, Many Syllables**
Pp 3

MS 13/K/7 n.d. **In the Imperial Dictionary**
Note beginning ‘In the Imperial dictionary’. Pp 2

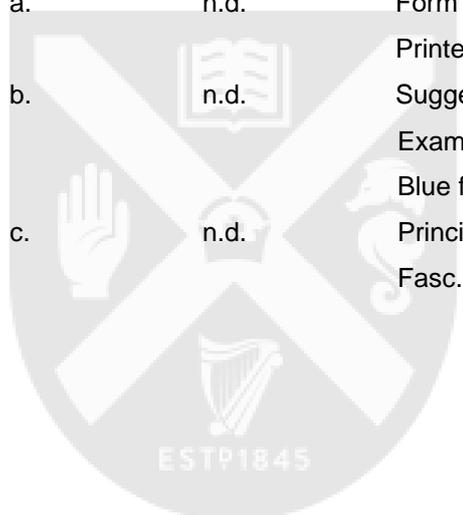
MS 13/K/8 02/02/1891 **New Word. Normate Resultant**
Fasc. in large writing with blue pencil. pp 6

MS 13/K/9 02/1886 **On the Numerics of the Elements**
Offprint of paper by E.J. ??????. *Phil Mag*, Feb 1886 with memos by J.T. on wrapper.



- MS 13/L/1** 08/1870 **On an India-Rubber Valve Introduced at the Belfast Water-Works**
Single sheet, reprint from Civil Engineer & Architects Journal, Nov. 1855.
With memo at foot dated Aug 1870.
- MS 13/L/2** 14/02/1861 **As to the Rigid Suspension Bridge Invented by Me and Worked out in Models**
Double sheet. Letter written 14 Feb 1861 to Editor of Civil Engineer & Architects Journal, but not sent, dealing with James Thomson's own work on the matter.
- MS 13/L/3** 08/07/1862 **Question as to Strength of Floor over Anatomy Class-room, July 8, 1862**
Double sheet.
- MS 13/L/4** 07/05/1864 **Notes for Proposed Self-Registering Wind Gauge**
Fasc. Attached to this an envelope containing drawings & notes on 4 scraps of paper.
pp 15
- MS 13/L/5** 09/1866 **"The Way It Was" & "The Way It Is"**
Drawings on two pages of a double sheet, showing the arrangement of connexion with the sewer at James Thomson's house at 17 University Square.
- MS 13/L/6/A** 01/07/1867 **Proposed Modified Arrangement of Experiment for Exhibiting Influence of Rotation of the Earth**
With small leaf of calculations. pp 3.
- MS 13/L/6/B** **Notes Towards Hydraulic Gyral/Gyrational Experiment for Manifesting Terrestrial Effects (Written Down) of the Earth's Rotation**
Rough paper with large writing in blue pencil, from the last years of James Thomson's life. Pp4
- MS 13/L/7** n.d. **On the Jointed Prisimatic Structure of the Giant's Causeway & Other Basaltic Rocks**
Reprint from Annual Report of B.N.F.C. 1869-70, with pencil notes and drawings.
- MS 13/L/8** 07/01/1870 **Notes on Capillarity**
Fasc. pp 4
- MS 13/L/9** n.d. **Suggestion for New Lactometer**
Written on the detached cover of Inventory of the food collection, Bettinal Green branch museum.

MS 13/L/10	04/1880	Notes on Flow Round River Bends Two sheets of notes of observations on the model for flow round river-bend 4 March 1879 and April 1880
MS 13/L/11	03/1881	Father's Theory About the Effect of Porous Sails Single sheeting note paper written on both sides.
MS 13/L/12	n.d.	Notes of Various Matters Considered as Perhaps Being Suitable for Being Patented or Copyright Secured double sheet. Without date.
MS 13/L/13		Relative to Examination Systems Collection labelled 'Relative to Examination Systems containing:
a.	n.d.	Form for Examiner's Report Printed double sheet of blue foolscap. (Q. K. I.)
b.	n.d.	Suggestions & Recommendations as to Modes of Conducting Examinations & Combining Marks of Different Examinations Blue foolscap. Pp4, one blank.
c.	n.d.	Principles for Assignment of Values to Examination Questions Fasc. Pp6, 3 blank.



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Note

Other letters, not listed below, will be found among the manuscripts, as follows:

Robert Ball, (1802-1857)	B1a B1b
John Campbell	F2a
J.D. Everett	K1a K1b
Thos. Harvey	K1c
J.A. Larcom, (1801-1879)	B2b B2c
Max Müller, (1823-1900)	K2a
Robt. Patterson, (1802-1872)	F2b
John Purser	D2b
G.K. Smith	F2d
G. Johnstone Stoney, (1826-1911)	B1c
P.G. Tait	K1d
A.O'D. Taylor	F3a
Elizabeth Thomson	B2e F1c F1d
Jas. Thomson, Junior*	H1d H2c
Wm. Thomson	A12 E1b

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F1b
F1c
F1d
F1e
F1f
F5
H1a
H1b
H1c
H1d
H2c

* Son of Prof. Jas. Thomson (1822-1892)

Grandson of 1st Prof. Jas. Thomson (1786-1849)

MS 13/M/1

Correspondence with John Aitken, (1839-1919)

About Aitken's theories of ocean temperatures and the structure of ice-bergs.

- | | | |
|----|------------|-------------------|
| a. | 27/01/1875 | Aitken to Thomson |
| b. | 19/02/1875 | Aitken to Thomson |
| c. | 23/12/1876 | Aitken to Thomson |
| d. | 01/01/1877 | Aitken to Thomson |
| e. | 15/01/1877 | Aitken to Thomson |

MS 13/M/2

Thomas Andrews (1813-1885)

- | | | |
|----|------------|---|
| a. | 11/10/1873 | Thomson to Andrews
In reply to suggestion about presidency of Section A at BA, Belfast meeting, 1874 |
| b. | 05/02/1874 | Andrews to Thomson
Papers, p.lxxi. |
| c. | 15/04/1874 | Andrews to Thomson
Papers, p. lxxii. |
| d. | 16/04/1874 | Andrews to Thomson
Papers, p. lxxiii |
| e. | 13/07/1874 | Andrews to Thomson |
| f. | 06/01/1875 | Andrews to Thomson |

MS 13/M/3**W. H. Barlow (1812-1902)**

- a. 19/10/1885 Barlow to Thomson
- b. 27/10/1885 Barlow to Thomson
Enclosing letter of F. Stevenson, engineer, L & NWR to B, 24 Oct 1885
- c. 11/11/1885 Thomson to Barlow
Copy
- d. 14/11/1885 Barlow to Thomson
- e. 05/08/1887 Thomson to Barlow
- f. 08/08/1887 Barlow to Thomson
- g. 19/08/1887 Barlow to Thomson
Dealing with safety of metal structures, see Papers p. 404.

MS 13/M/4**Archibald Barr (1855-1931)**

- a. 11/10/1885 Barr to Thomson
Sending references to work on reported stress.
- b. 10/11/1885 Barr to Thomson
- c. 12/11/1885 Thomson to Barr
About T's work on ice.
- d. 06/1886 Barr to Thomson
Experiments on Stresses
- e. 25/09/1886 Barr to Thomson
Equipment of new engineering laby.
- f. 05/10/1886 Barr to Thomson
Equipment of new engineering laby.
- g. 20/07/1888 Barr to Thomson
Early work on the Range-finder
- h. 10/02/1889 Barr to Thomson
- i. 05/03/1889 Barr to Thomson
- j. 10/03/1889 Mrs Barr to Thomson
Mrs Barr on behalf of B.
- k. 19/03/1889 Barr to Thomson
Trial of Range-Finder
- l. 22/03/1889 Barr to Thomson
- m. 26/03/1889 Barr to Thomson
- n. 14/04/1889 Barr to Thomson

MS 13/M/5 **J.T. Bottomley (1845-1926)**

MS 13/M/5 30 Dec 1879 Bottomley to Thomson
Report of work done with a class in T's absence and statement of a problem set, attached is a manuscript in pencil, in T's hand, containing his solution.

MS 13/M/6 **J.D. Evertt, (1831-1904)**

- a. 31/12/1873 Evertt to William Thomson
About underground temperature research, and units; contains a list of words suggested by Prof Mc Douall as names for the new units
- b. 15/12/1874 Evertt to William Thomson
Mainly concerned with questions of nomenclature.
- c. 21/12/1874 Evertt to William Thomson
Mainly concerned with questions of nomenclature. With enclosure from E's treatise on units.
- d. 18/09/1876 Evertt to William Thomson
Mainly concerned with questions of nomenclature.
- e. 28/09/1876 Thomson to Evertt
Copy. Mainly concerned with questions of nomenclature.
- f. 06/10/1876 Memo on Metric Units of Force by James Thomson
Mainly concerned with questions of nomenclature.
- g. 24/07/1878 Evertt to William Thomson
Mainly concerned with questions of nomenclature.
- h. 28/04/1880 Evertt to William Thomson
About T's theory of effect of stress on melting & solution.

MS 13/M/7 **Michael Faraday (1791-1867)**

- a. 30/07/1858 Thomson to Faraday
Papers p212. Copy.
- b. 04/09/1858 Faraday to Thomson
Papers p212.
- c. 09/11/1858 Thomson to Faraday
Papers p214. Copy.
- d. 15/11/1858 Faraday to Thomson
Papers p216.
- e. 24/11/1858 Thomson to Faraday
Papers p217. Copy.

MS 13/M/8 **Thomas Claxton Fiddler (1841-1917)**

- a. 22/07/1881 Fiddler to William Thomson
Papers p212. Copy.
- b. 23/08/1881 Thomson to Fiddler
In Reply to MS18/M/8/A
- c. 09/11/1858 Fiddler to Thomson
About suspension bridges.

MS 13/M/9 **W.M. Froude (1810-1879)**

- MS 13/M/9 30/06/1877 W.M Froude to R.D. Napier
- On an envelope attached to this a note in T's hand "Mr Froude's letter to Napier Esq. lent to me by Mr Brownlee in Sept or Oct 1877." A description of experiment with a model of the "Russian round ship."

MS 13/M/10 **George Fuller (-1917)**

- a. 21/01/1872 Fuller to Thomson
With discussion of a question on framed structures.
- b. 11/01/1873 Fuller to Thomson
Reference to intention to stand for T's chair at QUB, with account of procedure adopted in regulating flow in a stream.

MS 13/M/11 **Joseph A. Galbraith (1818-1890) (Fellow of Trinity College Dublin)**

- a. 15/03/1888 Galbraith to Thomson
- b. 26/03/1888 Thomson to Galbraith
Memo of reply sent.
- c. 28/03/1888 Galbraith to Thomson
Acknowledgement. Query about T's work on centrifugal pump.

MS 13/M/12 **James Geikie (1839-1915)**

- MS 13/M/12/1 19/01/1882 Geikie to Thomson
Question of ice-sheets.

MS 13/M/18 S.P. Langley (1834-1906)

- a. 06/12/1890 Thomson to Langley
Copy
- b. n.d. Langley to Thomson
- c. n.d. Thomson to Langley
Correspondence about Ferrel's papers. Copy.

MS 13/M/19 Charles MacDouall (Prof of Greek, QUB 1850-1878)

- MS 13/M/19 04/12/1882 MacDouall to Thomson
In hand of "E.M.D". About loan of books from Glasgow library.

MS 13/M/20 Mrs Jane MacDouall

- MS 13/M/20 03/04/1889 Mrs Jane MacDouall to Mrs Jas. Thomson
Envelope with postmark Ap. 3 1889, inscribed "Mrs MacDouall concerning Prof Purser's candidature for President, Q's College".

MS 13/M/21 Robert Manning (1816 – 1917)

- MS 13/M/21** 12/10/1881 Manning to Hancock
With note of Hancock enclosing this to J.T. It deals with construction of weirs on the Shannon and the theories of James Perry.

MS 13/M/22 James Clerk Maxwell (1831-1879)

- a. 13/07/1871 Maxwell to Thomson
- b. 21/1871 Thomson to Maxwell
Copy.
- c. 24/07/1871 Maxwell to Thomson
Correspondence about boiling-point, with a view to Maxwell's book on heat.
- d. 02/09/1871 Maxwell to Thomson
- e. 11/01/1873 Maxwell to Thomson
About curved rays of light.
- f. 27/03/1875 Maxwell to Thomson
- g. 26/06/1875 Maxwell to Thomson
Postcard, signed 'dp/dt'.
- h. 08/07/1875 Maxwell to Thomson
With diagram of lines on Gibb's Surface

- i. n.d. 'Diagram of Prof J. Willard Gibbs's Thermo-dynamic Surface, Made in Plaster by dp/dt ...'
- j. 25/06/1879 Maxwell to Thomson
Marked in Thomson's hand: 'On Disk, Ball and Cylinder Integrator'.
Papers p. 457.
- k. 16/07/1879 Thomson to Maxwell
In acknowledgement of MS 13/M/22/J. Papers p. 458.

MS 13/M/23 C.W. Merrifield (1827-1884)

- a. 23/11/1878 Merrifield to Thomson
- b. 25/11/1878 Thomson to Merrifield
- c. n.d. Prismatic Structure of Basalt
Referred to in MS 13/M/23A and MS 13/M/23/B, bearing critical notes by Thomson.

MS 13/M/24 Hugh Robert Mill (1861-1950)

- a. 18/01/1892 Mill to W.M. Thomson
- b. 23/03/1892 Jas. Thomson to Mill
- c. 24/03/1892 Mill to J. Thomson.
About Ferrel's work on Atmospheric Circulation

MS 13/M/25 Joseph John Murphy (1827-1894)

- a. 02/04/1859 Murphy to Thomson
About atmospheric currents, marked "Important letter, J.T."
- b. 13/01/1875 Murphy to Thomson
- c. 30/07/1875 Murphy to Thomson
- d. 21/12/1875 Murphy to Thomson
- e. 30/03/1892 Thomson to Murphy
Copy, with manuscript notes in pencil about the history of ideas on atmospheric circulation.
- f. 05/04/1892 Murphy to Thomson
- g. 06/04/1892 Thomson to Murphy
Copy.
- h. 11/04/1892 Murphy to Thomson
With off-prints of newspaper reports of Joseph John Murphy's papers before B.N.H.P.S:

- 1) 06/02/1856 On the Circulation of the Atmosphere.
- 2) 21/01/1857 On Tornadoes & Water Spouts

MS 13/M/26 **W. Nesbitt (1824-1881), Prof of Latin, QCB (1864-1881)**

MS 13/M/26 15/01/1881 Nesbitt to Thomson

MS 13/M/27 **John Perry (1850-1920)**

MS 13/M/27 16/05/1884 Perry to Thomson

MS 13/M/28 **Edward C. Pickering**

MS 13/M/28 22/04/1874 Pickering to Thomson
With graph, about Requault's observations.

MS 13/M/29 **Frederick Purser (1840-1910)**

MS 13/M/29 21/09/1884 Purser to Thomson
Along with translation with critical comments, of Heinrich Streintz, (1848-1892) "Die physikalischen Grundlagen der Mechanik" (Leipzig, 1883).

MS 13/M/30 **John Purser (1835-1903)**

MS 13/M/30 20/09/1884 Purser to Thomson
Dealing with work of Streintz (see MS 13/M/29).

MS 13/M/31 **William Ramsay (1852-1916)**

- a. 17/11/1883 Ramsay to Thomson
Account of R's experiments on change of state.
- b. 19/04/1884 Ramsay to Thomson
Account of R's experiments on change of state.
- c. 15/09/1886 Ramsay to Thomson
Account of R's experiments on change of state.

MS 13/M/32 **W.J. Macquorn Rankine (1820-1872)**

- a. 04/07/1870 Rankine to Thomson
In acknowledgment of loan of T's paper on strength of materials. With memo of reply in T's hand.
- b. 07/07/1870 Rankine to Thomson
In acknowledgment of loan of T's paper on strength of materials.
- c. 09/07/1870 Rankine to Thomson
In acknowledgment of loan of T's paper on strength of materials.

MS 13/M/33 **Osborne Reynolds (1842-1912)**

MS 13/M/33 26/05/1868 Reynolds to Thomson

MS 13/M/34 **W Chandler Roberts (afterwards Roberts-Austen) (1843-1902)**

- a. 03/11/1874 Roberts to Thomson
- b. 02/01/1877 Roberts to Thomson
- c. 07/01/1877 Thomson to Roberts
Draft reply about columnar structure of rocks.

MS 13/M/35 **Thomas Romney Robinson (1792-1882)**

MS 13/M/35 12/07/1856 Thomson to Robinson
Suggesting lower price for Ordnance Survey maps. Copy.

MS 13/M/36 **Warren de la Rue (1815-1889)**

- a. 23/05/1877 de la Rue to Thomson
- b. 30/05/1877 de la Rue to Thomson
Suggesting the use of phosphor bronze for integrating machine.

MS 13/M/37 H.C. Sorby (1826-1908)

- a. 05/02/1862 Sorby to Thomson
Papers p.252.
- b. 14/03/1862 Thomson to Sorby
Papers p.254.
- c. 22/03[1862] Sorby to Thomson
Papers p.255.
- d. 24/03/1862 Thomson to Sorby
Papers p.256.
- e. 20/08/1862 Sorby to Thomson
Papers p.256.
- f. 26/09/1863 Thomson to Sorby
Copy.

MS 13/M/38 George Gabriel Stokes (1819-1903)

- a. 06/06/1871 Stokes to Thomson
- b. 20/06/1873 Stokes to Thomson
With note of reply sent on 4 July 1873.

MS 13/M/39 P.S. Tait (1831-1901)

- a. 25/04/1870 Tait to Thomson
About atmospheric refraction.
- b. 14/06/1884 Tait to Thomson
- c. 26/06/1884 Tait to Thomson
With note added on the envelope & pencilled comment by J.T. within, dealing with frames of reference.
- d. 05/07/1884 Tait to Thomson
With note on envelope
- e. 30/09/1884 Tait to Thomson
- f. 19/01/1885 Tait to Thomson
About Tait's suggested modification of Thomson's isothermal curve.
- g. 24/01/1885 Tait to Thomson
About Tait's suggested modification of Thomson's isothermal curve.
- h. 28/01/1885 Tait to Thomson
Postcard. About Tait's suggested modification of Thomson's isothermal curve.
- i. 29/01/1885 Thomson to Tait
About Tait's suggested modification of Thomson's isothermal curve. Copy.

- j. 29/01/1885 Tait to Thomson
About Tait's suggested modification of Thomson's isothermal curve. Postcard.
- k. 05/02/1885 Tait to Thomson
About Tait's suggested modification of Thomson's isothermal curve.
- l. 09/09/1886 Tait to W. Thomson
About Tait's suggested modification of Thomson's isothermal curve.
- i. n.d. 'Letter of Prof Tait of special interest to me, J.T.'
On envelope, enclosing an account of Fischer's work in pencil, in Tait's hand.

MS 13/M/40 James Thomson, Senior, (1786-1849)

- MS 13/M/40 18/07/1844 From a letter to his father, dated July 18, 1844
Copy. About a plan for consumption of smoke.

MS 13/M/41 William Thomson (Lord Kelvin) (1824-1907)

- a. n.d. William Thomson to James Thomson
A note of invitation to Cambridge.
- b. 26/04/???? William Thomson to James Thomson
With notes by James Thomson about modules of elasticity.
- b1. 20/01/1857 William Thomson to James Thomson
With "receipt for gutta perch & cement" & references to cable-laying.
- c. 19/02/1862 William Thomson to James Thomson
Headed, in J.T.'s hand, "Hydraulics, Friction or viscosity of water".
- d. 04/03/1870 William Thomson to James Thomson
Copy of end of letter, with reference to size of molecules.
- e. 22/10/1873 William Thomson to James Thomson
About J.T.'s proposed presidency of Section A at B.A. meeting.
- f. 19/07/1878 James Thomson to William Thomson
About units & dimensions.

MS 13/M/42 Mrs Elizabeth Thomson (formerly Hancock) wife of James Thomson.

- MS 13/M/42 22/11/1891 Elizabeth Thomson to Jas Thomson, Junior.

MS 13/M/43 Frances Anna Thomson, Lady Kelvin (formerly Blandy)

- a. [19/08] Frances Anna Thomson to James Thomson

Containing message from William Thomson about the effect on metals of "Sunday rest".

- b. 17/05/1889 Frances Anna Thomson to son or daughter of James Thomson.
About views of Stokes on words, "posture", orientation and others. The postscript of a letter.

MS 13/M/44 Sylvanus P. Thomson (1851-1916)

- MS 13/M/44 24/07/1909 Sylvanus P. Thomson to Jas Thomson, Junior
Enquiry for Sylvanus P. Thomson's life of Lord Kelvin

MS 13/M/45 W.C. Unwin (1838-1933)

- MS 13/M/45 08/02/1866 Unwin to Thomson
Proposed licence to Fairbarin Coy for manufacture of T's turbines.

MS 13/M/46 John Warner, (American engineer)

- a. 30/10/1863 Warner to Thomson
b. 30/12/1863 Warner to Thomson
With pencilled note about J.T.'s reply.
c. 04/02/1864 Warner to Thomson
Letters describing Warner's visit to Paris & other places.

MS 13/M/47 Walter White

- a. 26/07/1871 White to Thomas Andrews
b. 28/07/1871 J to White
Memo of reply with reference to Thomson's paper in Pir. Roy. Soc.

MS 13/M/48 A.M. Worthington (1852-)

- MS 13/M/48 06/02/1884 Worthington to Thomson
With memorandum of reply with reference to Worthington's work on capillary action.

MS 13/M/49 Robert Young (1822-1917)

- a. 05/01/1875 Young to Thomson
- b. 10/03/1880 Young to Thomson

MS 13/M/15.5 Robert John Kane, (Sir) (1809-1890)

MS 13/M/15.5 04/01/1865 Kane to J
With reprint of K's lecture on "Industry in Ireland" from Jour. Society of Arts, 16 Dec 1864

MS 13/N Manuscripts of James Thomson, Senior, (1786-1849)

MS 13/N/1 1809-1814 **'Exercises in Natural Philosophy', 1811-12 and 'Matthew Steel & J Gardiner'**

MS book (225 x 180 mm) used at Glasgow during student-period (1809-1814). From one end "Exercises in Natural Philosophy, 1811-12", answers in essay form to questions, numbered & dated. Some "Voluntary Exercises" written in shorthand. From the other end, on cover, 1 January, 1810, Matthew Steel & J Gardiner. Day-book of goods exported, etc & money received for the same", used for notes on mechanics. Some passages in shorthand.

MS 13/N/2 1814-1832 **Public examination of the Junior Mathematical Class, April 26, 1825**

MS. book (225 x 180 mm), period of Belfast Professorship (1814-1832). Names of pupils & questions set to each, followed by class register. From the other end, two pages of algebraic examples, followed by 4 pp. notes on quadratic equations.

MS 13/N/3 1827-1832 **Royal Belfast Academical Institution**

Long book (395 x 165 mm) containing class-registers & examination records, 1827 to 1832.

MS 13/N/4 1828-1832 **Belfast Institution, College Department, Mathematical Classes 1828-29**

Small book (197 x 123 mm), a numbered series of mathematical questions, (1-8 missing) with notes of their having been set at Examinations. From the other end, after a page of similar questions, a record of fees paid by students, with heading "Belfast Institution, College Department, Mathematical Classes 1828-29", continued till 1831-2.

MS 13/N/5 1832-1836 **Record of Students Attendance, Junior Mathematical Class, 1832-33**

MS. book (250 x 205 mm) "Record of Students Attendance, Junior Mathematical Class, 1832-33", followed by mathematical exercises & record of examination up till 1836. Continued from the other end, a number of loose sheets & printed class-lists interleaved.

MS 13/N/6 [1829]

(President's) Address to the Students of the Belfast College

MS. without covers (24 numbered pp. 232 x 190 mm) copy in feminine hand of "(President's) address to the students of the Belfast College". Inferred date 1829. Note by Mr Povey, Librarian: "James Thomson became President of the Faculty of Arts, Belfast Academical Institution, in 1829. (R.B.A.I. Centenary volume, page 209). The paper of this MS. is watermarked 1828".

MS 13/N/7 06/11/1832

Introductory Lecture, Glasgow College, Nov 6, 1832

MS., sewed in paper wrappers. (230 x 180 mm) "Introductory Lecture, Glasgow College, Nov 6, 1832", pages numbered 1-37.

Separate fascicle "Nov 1834", numbered 1* -6*. Inside the first leaf a list of mathematicians & their dates.

MS 13/N/8 n.d.

Measurement

Two MS books, sewed without wrappers (253 x 205 mm), the first paged 1 – 24, the second 40 – 70, followed by blank pages containing a text-book of measurement.

MS 13/N/9 n.d. 845

Proposed System of Education for the intended Irish Colleges

Double sheet of MS. (253 x 205 mm).

MS 13/N/10 11/1827

Remarks on the Phenomena of the Heavens as they Appear from Different Bodies in the Solar System

Reprint from the Belfast News-letter of November 23, 27, 30 – 1827. (6 copies) Lecture: "Remarks on the phenomena of the Heavens as they appear from different bodies in the solar system", delivered to the Belfast Literary society, Nov 5, 1827.

One copy inscribed: "R.J. Martin, Esq., with James Thomson's compliments November 1910"

MS 13/N/11 [1836]

Time Piece inscription

Copy of inscription on "time –piece" presented by students of year 1835-6.