

Manuscripts of James Thomson

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A. Manuscript Books

1. Book in wrappers of newspaper, on which is a date Apr 7, 1837, (200 x 130 mm), containing exercises in geometry, worked by "Jacobus Thomson, Bench 3", at Glasgow College
2. With marbled covers, (202 x 128 mm), 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
3. Book with stiff marbled covers (255 x 200 mm) "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
4. Note-book, marbled covers, (205 x 125 mm) "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.
5. In paper covers, (255 x 210 mm) "Essay on Overshot water wheels, James Thomson May 1942"
6. Small note-book, marbled covers (155 x 98 mm) 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
7. Small black note-book (160 x 100 mm) "Natural Philosophy 1847", notes of a course of lectures (given by Wm Thomson?)
8. Book with limp marbled covers, (195 x 165 mm) "Note-book, No. W.W. 1)
9. Note-book with black covers (200 x 127 mm) with little "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"
10. Book with black covers, (182 x 115 mm) "Calculation Book, No. 2, James Thomson" date at beginning, March 4, 1852, Calculations relative to vortex-turbines

11. Note-book with stiff marbled covers (184 x 115 mm) "Applications of the Principles of States", contains miscellaneous notes, some in shorthand
12. Book with stiff marbled covers (220 x 180 mm), "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"
13. Note-book (200 x 165 mm) containing notes on thermodynamics & on ocean currents. Inserted is a pencilled letter from Wm Thomson on the latter subject, dated 22 Oct 1872
14. 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"
15. 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.

B. Papers relating to Professorships

1. Packet inscribed - "Queen's University Papers Testimonials & Applications for Examinership" containing -
 - a. letters, J.T. to Robert Ball, 4 July 1855
 - b. letters, J.T. to Robert Ball, 4 July 1856
 - c. letters, J.T. to G. Johnstone Stoney, 3 July 1858
 - d. with printed copy of testimonials
2. Envelope with list of contents inscribed
 - a. "Commission of Her Majesty Queen Victoria appointing me to the Professorship in Belfast" 22 Dec 1857
 - b. Letter - J.A. Larcom to J.T. 30 Dec 1857 relating to the above
 - c. Letter, J.A. Larcom to President, Queen's College, Galway, 24 Jan 1861 (copy) about pensions
 - d. "Note as to my Commission from Her Majesty for Professorship in Glasgow"

Along with these, but not included in the list on envelope:
 - e. Letter, Elizabeth Thomson to James Coutts, 6 Sept 1880, relating to amount of pension, and memorandum of dates & income
3. "Induction dissertation, University of Glasgow", Prof. Nesbitt put it into Latin for me"

Title: De ratione incolimitatem periculumre aestimandi quod ad structurarum usum machinarumque attinet"

C. Lectures

Four books containing notes for college lectures

1. Green covers (220 x 185 mm), inside front cover "Queen's College Belfast, Civil engineering Class 1858"
2. Black covers (220 x 190 mm), label on cover "(Surv. & mapping 1858), 2nd Year. Lecture & Practice courses, From 1861-2 forward, 1862-3, 1863-4"
3. Red mottled covers (227 x 178 mm), on first blank leave - "Memoranda of 1st Year Course from 1863-4 forward"
4. Similar to last. "Memoranda of 3rd Year Lecture & Practice Courses from 1862-3 forward"

Notes for lectures on elementary mechanics:

5. Fasc. pp 15 (3 blank) "Simplified proof of the parallelogram of forces". 1877
6. Fasc. pp 27 (3 blank) 27 Nov 1888
7. Fasc. pp 17 (12 blank) 18 Dec 1888
8. "Notes for introductory lecture or advice to students entering my practice classes" pp 4 (one blank)
9. Bundle marked "Notes for contemplated lectures to working classes. Perhaps two, three or four lectures for May or June 1870. pp 8 (one blank)
10. "Copy made by John Stewart of lecture-notes on Architecture as a fine art" pp 48 (2 blank) 2 Oct 1873

D. Papers relating to fluid motion

1. Jet pump. "New proposed pump, July 1868" pp 19
2. a. "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)

b. 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"
3. Fasc. (blue paper). "Theory of the flow of water through orifices similar in form & similarly situated relatively to the water surface", pp 13
4. 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)
5. Bundle connected with paper by John Perry
 - a. Letter, W.E. Ayrton to J.T. 15 March (1879), sent with J.P.'s manuscript
 - b. Manuscript of J.P. on "Flow of liquid" pp 21
 - c. Letter, W.E. A to J.T. 25 Sep (1879) enquiring about the last
 - d. Fasc. "Notes on Mr Perry's paper on Flow of liquid" pp 7
6. Fasc. "Flow through similar notches with other similarities & proportionalities (as usual J.T.)" 14 Feb 1885, pp 7 (one blank)
7. Fasc. "On the flow of water through rectangular gauge-notches in vertical thin plates" (blue paper) pp 27

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:

1. Fasc. enclosed "On Bars, notes begun in Lalla Rookh near Cowes, July 1885"
 - a. Single sheet of pencilled memoranda
 - b. Note in handwriting of W.T. scribbled on back of envelope addressed to Mrs Jas Thomson
 - c. "Considerations on the origin & perpetuation of Bars at the seaward limits of rivers & tidal estuaries" 3 pages
2. Printer letter from A.T. Atchison, Socy Brit. Ass. Intimating appointment of Committee to examine the subject, Oct. 1887
3.
 - a. "Notes for new theory of the mode of formation of Bars at the sea outlets of rivers", 16 July 1889
 - b. (pp 8) along with "Further notes on Bars, written by B.J. from father's dictation. Glasgow 25th Sept 1889" (pp 4)
4. "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" 7 Dec 1889 (pp 5)

F. Ventilation

1. The new college at Glasgow
 - a. "Notes of useful principles" pp 3
 - b. Copy of letter from W.T. 30 Sept 1864 with additional page in W.T.'s hand
 - c. Reply, unsigned, in hand of Mrs E. Thomson
 - d. "Memo of information sent in letter of E. Thomson to Wm. Thomson from Dublin about Oct 1864"
 - e. Letter, W.T. to J.T. , 13 Dec 1864
 - f. Notes of answer sent to WT, 15 Dec 1864

2. Rosemary Street Church
 - a. Letter, John Campbell to J.T. 9 June 1865
 - b. Letter, Robert Patterson to J.T. 28 Dec 1865
 - c. "Note of opinion on question of ventilation of meeting-house of 1st Congregation, Rosemary Street, to the Sub-committee on that matter", pp 6, 6 Jan 1866
 - d. Letter, G.K. Smith to J.T. 7 May 1866

3. Belfast Museum
 - a. Letter, A.O'D. Taylor to J.T., 15 July 1868
 - b. "Notes on Dr Templeton's proposed ventilation for the museum Belfast"

4. R.A. Irish, Mathematical Class-room

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

5. Bute Hall, Glasgow University

Copy of letter J.T. to W.T. describing proposed new system, 30 Dec 1877

G. Atmospheric Circulation

1. Single leaflet, 6 April, 1859. "On the reason why the equatorial rising belt keeps so close to the equator at all seasons of the year"
2. Fasc. pp 12, "Atmos. Circ. Notes & Queries
3. Claim to priority, written on the backs of leaflets of the B.N.H.P.S. pp 3
4. Fasc. pp11. "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"
5. Fasc. pp 4. "Primary date, 21 Oct 1891"
6. Fasc. pp 22 "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"
7. Fasc. pp 12, "Notes to be spoken about to W.T." 19 Dec 1891
8. Fasc. pp 9, "Primary date" 6 Jan 1892
9. Fasc. pp 8. "From father's dictation" 7 Jan 1892
10. Fasc. pp 26 "2nd Form, 7th Jan 1892" followed by "srd Form 8th Jan 1892"
11. Fasc. pp 6, "Primary date", 5 March 1892
12. Fasc. pp 4 "Date 17 Ap 1892"

H. Jupiter

In wrapper addressed to Miss Thomson.

1. Letter (in pencil) J.T. to W.T. , 8 Sept 1891
 - a. Letter (on large sheet, in pencilled large handwriting) J.T. to W.T. 21 Sept 1891
 - b. Letter W.T. to J.T. 3 Oct 1891
 - c. Letter J.T. to W.T. (pencil), 2 & 3 Oct 1891 with covering letter J.T. Junior to W.T., 3 Oct 1891
2. In blue envelope marked "Jupiter, also Sun"
 - a. Fasc. pp 5 "Notes out of Ball's Story of the heavens"
 - b. Sheet of rough paper with pencilled notes in large writing
 - c. Covering letter, J.T. Junior to W.T. 11 Oct 1891
3.
 - a. Double sheet. "Speculative suggestion ..."
 - b. Double sheet. Rough notes of calculations
4. De la Rue's pocket diary for 1860, containing information about Jupiter

I. Coagulation and Liquefaction

1. Report of paper read to B.N.H.P.S. 2 Dec 1857

"On the effect of pressure in lowering the freezing point of water, and on the plasticity of ice", with historical memorandum by J.T. dated April 1866

2. Offprint of paper by A.H. Curtis, in Phil mag, Dec 1866, "On the freezing of water at temperatures lower than 320 F". with criticisms of J.T.
3. Fasc. pp 12, "Scribble memo", 31 Aug 1890

J. Solid, Liquid & gaseous states

1. Fasc. "Notes and queries on gases, liquid, fluids" 10 May 1869 pp 12
2. Fasc. "Notes on solid liquid & gaseous states of matter" 5 June 1871, pp 9 (one blank)
3. Fasc. "Notes & queries on boiling & superheating in liquids, or on boiling & on conditions in liquids brought past their boiling point without gasification", 8 July 1871, pp 10 (one blank)
4. Fasc. "Notes on boiling & allied phenomena", 15 July 1871, pp7
5. Fasc. "Fasicile of papers containing progressive notes on solid, liquid & gaseous states. 25 May 1873 pp 15

K. Large envelope marked "Notes on words" containing:

1. Bundle "Notes on nomenclature in reference to improvements in expression", contents -
 - a. Letters, J.D.Everett to J.T. 25 March 1875
 - b. Letters, J.D.Everett to J.T. 22 Aug 1875
 - c. Letters, Thos. Harvey to J.T. 21 June 1875
 - d. Postcard, in hand of P.S. Tait to J.T., postmark 7 Feb 1876
 - e. Miscellaneous notes, 25 pp
2. Bundle. "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."

Contents -
 - a. Letter, Max Müller to J.T. 20 June 1889
 - b. Miscellaneous notes, partly historical pp 17
3. " 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." Pp 19, Stuck inside is an examination paper of 5th April 1881, in which "apocentric force" is used.
4. Double sheet. "Notes & Queries for reference to W.T. Aug 1888"
5. "Words for which deviations are wanted." pp 3
6. "Long words, many syllables" pp 3
7. Note beginning "In the Imperial dictionary." pp 2

8. Fasc. in large writing with blue pencil. "New word. Normate resultant" dated 2 Feb 1891 pp 6
9. Offprint of paper by E.J. ?????? "On the numerics of the elements" (Phil Mag, Feb 1886) with memos by J.T. on wrapper

L. Miscellaneous Papers

1. "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
2. "As to the rigid suspension bridge invented by me and worked out in models". Letter written 14 Feb 1861 to Editor of *Civil Engineer & Architects Journal*, but not sent, dealing with J.T.'s own work on the matter. (Double sheet)
3. "Question as to strength of floor over anatomy class-room, July 8, 1862" (double sheet)
4. "Notes for proposed self-registering wind gauge" 7 May 1864

Fasc. pp 15, attached to this an envelope containing drawings & notes on 4 scraps of paper
5. "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 J.T.'s house 17 University Square, Sep. 1866
6. a. "Proposed modified arrangement of experiment for exhibiting influence of rotation of the earth" 1 April 1867, pp 3 with small leaf of calculations

and

b. "Notes towards hydraulic gyal/gyrational experiment for manifesting terrestrial effects (written down) of the earth's rotation", pp 4 of rough paper with large writing in blue pencil, from the last years of J.T. life
7. "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
8. "Notes on capillarity", 7 Jan 1870 Fasc. pp 4

9. Suggestion for new lactometer, written on the detached cover of Inventory of the food collection, Bettinal Green branch museum
10. Two sheets of notes of observations on the model for flow round river-bend 4 March 1879 and April 1880
11. "Father's theory about the effect of porous sails", March 1881, single sheeting note paper written on both sides
12. "Notes of various matters considered as perhaps being suitable for being patented or copyright secured", double sheet. Without date.
13. Collection labelled "Relative to Examination Systems", containing
 - a. Printed "Form for Examiner's Report", (Q. K. I. ?) double sheet of blue foolscap
 - b. "Suggestions & recommendations as to modes of conducting examinations & combining marks of different examinations, (4 pp blue foolscap, one blank)
 - c. "Principles for assignment of values to examination questions" (Fasc. pp 6, 3 blank)

M Correspondence

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

| | |
|----------------------------------|-------------------------------------|
| Robert Ball, (1802-1857) | B1, a,b |
| John Campbell | F2a |
| J.D. Everett | K1, a,b |
| Thos. Harvey | K1, c |
| J.A. Larcom, (1801-1879) | B2, b,c |
| Max Müller, (1823-1900) | K2a |
| Robt. Patterson, (1802-1872) | F2,b |
| 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,d |
| Jas. Thomson, Junior* | H1d, 2c |
| Wm. Thomson | A12, E1b, F1 bcdef, 5, H1, abcd, 2c |

* Son of Prof. Jas. Thomson (1822-1892)
Grandson of 1st Prof. Jas. Thomson (1786-1849)

Papers of James Thomson (1822-1892)

Letters

1. Correspondence with John Aitken, (1839?-1919)

- a. A to T, 27 Jan 1875
- b. A to T, 19 Feb 1875
- c. A to T, 23 Dec 1876
- d. A to T, 1 Jan 1877
- e. A to T, 15 Jan 1877

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

2. Thos. Andrews (1813-1885)

- a. T to A, 11 Oct 1873, (copy)
In reply to suggestion about presidency of Section A at BA, Belfast meeting, 1874
- b. A to T, 5 Feb 1874 (Papers, p. lxxi)
- c. A to T, 15 April 1874 (Papers, p. lxxii)
- d. A to T, 16 April 1874 (Papers, p. lxxiii)
- e. A to T, 13 July 1874
- f. A to T, 6 Jan 1875

3. W. H. Barlow, (1812-1902)

- a. B to T, 19 Oct 1885
- b. B to T, 27 Oct 1885, enclosing letter of F. Stevenson, engineer, L & NWR, to B, 24 Oct 1885
- c. T to B, 11 Nov 1885 (copy)
- d. B to T, 14 Nov 1885
- e. T to B, 5 Aug 1887 (memorandum of contents)
- f. B to T, 8 Aug 1887
- g. B to T, 19 Aug 1887
Dealing with safety of metal structures, (see Papers p. 404)

4. Archd. Barr (1855-1931)

- a. B to T, 11 Oct 1885
sending references to work on reported stress
 - b. B to T, 10 Nov 1885
 - c. T to B, 12 Nov 1885 (copy)
about T's work on Ice
 - d. B to T, 6 Feb 1886
experiments on stresses
 - e. B to T, 25 Sep 1886
 - f. B to T, 5 Oct 1886
e & f equipment of new engineering laby
 - g. B to T, 20 July 1888
early work on the Range-finder
 - h. B to T, 10 Feb 1889
 - i. B to T, 5 Mar 1889
 - j. Mrs Barr on behalf of B, to T, 10 Mar 1889
 - k. B to T, 19 Mar 1889
trial of Range-finder
 - l. B to T, 22 Mar 1889
 - m. B to T, 26 Mar 1889
 - n. B to T 14 April 1889
5. J.T. Bottomley, (1845-1926)
- B to T, 30 Dec 1879
Report of work done with a class in T's absence and statement of a problem set, attached is a ms., in pencil, in T's hand, containing his solution
6. J.D. Evertt, (1831-1904)
- a. E to Wm Thomson, 31 Dec 1873
about underground temperature research, and units; contains a list of words suggested by Prof Mc Douall as names for the new units
 - b. E to T, 15 Dec 1874
 - c. E to T, 21 Dec 1874, with enclosure from E's treatise on units
 - d. E to T, 18 Sep 1876
 - e. T to E, 28 Sep 1876 (copy)
 - f. "Memo on metric units of force" by J.T. , 6 Oct 1876
 - g. E to T, 24 July 1878
(b) - (g) are mainly concerned with questions of nomenclature
 - h. E to T, 28 April 1880
About T's theory of effect of stress on melting & solution

7. Michael Faraday (1791-1867)
 - a. T to F, 30 July 1858 (Papers p212) (copy)
 - b. F to T, 4 Aug 1858 (Papers p212)
 - c. T to F, 9 Nov 1858 (Papers p 214) (copy)
 - d. F to T, 15 Nov 1858 (Papers p 216)
 - e. T to F, 24 Nov 1858 (Papers p 217) (copy)

8. J. Claxton Fidler, (-1917)
 - a. F to Wm Thomson, 22 July 1881
 - b. T to F, 23 Aug 1881 (copy), in reply to the last
 - c. F to T, 25 Aug 1881
About suspension bridges

9. Wm Froude (1810-1879) to R.D. Napier, 30 June 1877. On an envelope attached to this a note in T's hand "Mr Froude's letter to R.D. 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."
10. George Fuller (-1917)
 - a. F to T, 21 Jan 1872
With discussion of a question on framed structures
 - b. F to T, 11 Jan 1873
Reference to intention to stand for T's chair at QUB, with account of procedure adopted in regulating flow in a stream

11. Joseph A. Galbraith (F.T.C.D.)
 - a. G to T, 15 Mar 1888
 - b. T to G, 26 Mar 1888 (memo of reply sent)
 - c. G to T, 28 Mar 1888 (acknowledgment)
Query about T's work on centrifugal pump

12. James Geikie (1839-1915)

G to T, 19 Jan 1882
Question of ice-sheets

13. W. J. Hancock

H to T, 22 Nov 1877,
About patent "tell-tale clocks"
14. A.S. Herschel (1836-1907)

H to T, 12 April 1874

Experiments with centrifugal fan

15. Fleming Jenkin (1833-1885)

- a. J to T, 11 Nov (1874?)
- b. J to T, 16 Nov 1874
- c. J to T, 26 Nov ?
- d. J to T, 7 march 1882 (with pencilled notes of T)
- e. J to T, 17 March 1882

Queries about dynamics & hydraulics (Kane) see end of list

16. *Mrs Elizabeth King

Three letters with inscription "Copy of letter from Father to Aunt Elizabeth"

- a. * 8 Nov 1849
- b. * 28 Sept 1852
- c. 25 Oct 1852

17. George King

K to T, 16 Jan 1874, accompanying proof of K's paper on *Glaciers* (second part)

18. S.P. Langley (1834-1906)

- a. T to L, 6 Dec 1890 (copy)
 - b. L to T
 - c. T to L (copy)
- Correspondence about Ferrel's papers

19. Charles MacDouall (Prof of Greek, QUB 1850-1878)

MacD to T, 4 Dec 1882 (in hand of "E.M.D") about loan of books from Glasgow library

20. 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.

21. Robert Manning

To W. Neilson Hancock, 12 Oct 1881, with note of the latter enclosing this to J.T. It deals with construction of weirs on the Shannon and the theories of James Perry

22. James Clerk Maxwell (1831-1879)

- a. M to T, 13 July 1871
 - b. T to M, 21 July 1871 (copy)
 - c. M to T, 24 July 1871
- correspondence about boiling-point, with a view to M's book on heat
- d. M to T, 2 Sep 1872
 - e. T to M, 11 Jan 1873
- about curved rays of light
- f. M to T, 27 March 1875
 - g. M to T, 26 June 1875, postcard, signed "dp/dt"

- h. M to T, 8 July 1875
with diagram of lines on Gibb's Surface
 - i. "Diagram of Prof J. Willard Gibb's Thermo-dynamic Surface, made in plaster by dp/dt ..." (undated)
 - j. M to T 25 June 1879
marked in T's hand - "On Disk, Ball and cylinder Int????? (Papers p. 457)
 - k. T to M, 16 July 1879 (copy), in acknowledgment of last (Papers p. 458)
23. C.W. Merrifield (-1884)
- a. M to T, 23 Nov 1878
 - b. T to M 25 Nov 1878
 - c. Copy of paper by Robert Mallet on "Prismatic structure of Basalt", referred to in the above letters, bearing critical notes by T.
24. Hugh Robert Mill (1861)
- a. M to Wm Thomson 18 Jan 1892
 - b. Jas Thomson to M, 23 Mar 1892
 - c. M to J.T. 24 Mar 1892
About Ferrel's work on atmospheric circulation
25. Joseph John Murphy, (1827-1894)
- a. M to T, 2 Apr 1859
About atmospheric currents, marked "Important letter, J.T."
 - b. M to T, 13 Jan 1875
 - c. M to T, 30 July 1875
 - d. M to T, 21 Dec 1875
 - e. T to M, 30 March 1892 copy, with ms. notes in pencil about the history of ideas on atmospheric circulation
 - f. M to T, 5 April 1892
 - g. T to M, 6 April 1892 (copy)
 - h. M to T, 11 April 1892, with off-prints of newspaper reports of J.J. M's papers before B.N.H.P.S. (1) On the Circulation of the atmosphere,
6 Feb 1856

(2) On tornadoes & water spouts, 21 Jan 1857
26. W. Nesbitt (-1881), Prof of Latin, QCB (1864-1881)
- N to T, 15 Jan 1881
27. John Perry (1850-1920)
- P to T, 16 May 1884
28. Edward C. Pickering

P to T, 22 April 1874
With graph, about Requaault's observations

29. Frederick Purser (1840-1910)

P to T, 21 Sep 1884, along with translation with critical comments, of Heinrich Streintz, (1848-1892) "Die physikalischen Grundlagen der Mechanik" (Leipzig, 1883)

30. John Purser (1835-1903)

P to T, 20 sep 1884
Dealing also with the work of Streintz (above)

31. Wm. Ramsay (1852-1916)

- a. R to T, 17 Nov 1883
- b. R to T 19 April 1884
- c. R to T 15 Sep 1886

Account of R's experiments on change of state

32. W.J. Macquorn Rankine (1820-1872)

- a. R to T, 4 July 1870, with memo of reply in T's hand
- b. R to T, 7 July 1870
- c. R to T, 9 July 1870

in acknowledgment of loan of T's paper on strength of materials

33. Osborne Reynolds (1842-1912)

R to T, 26 May 1868

34. W Chandler Roberts (afterwards Roberts-Austen) (1843-1902)

- a. R to T, 3 Nov 1874
- b. R to T, 2 Jan 1877
- c. T to R, 7 Jan 1877, draft reply about columnar structure of rocks

35. Thos. Romney Robinson (1792-1882)

T to r, 12 July 1856 (copy)
suggesting lower price for Ordnance Survey maps

36. Warren de la Rue (1815-1889)

- a. R to T, 23 May 1877
- b. R to T, 30 May 1877
suggesting use of phosphor bronze for integrating machine

37. H.C. Sorby (1826-1908)

- a. S to T, 5 Feb 1862 (Papers p. 252)
- b. T to S, 14 March 1862 (Papers p. 254)
- c. S to T, 22 March (Papers p. 255)
- d. T to S, 24 March 1862 (Papers p. 256)
- e. S to T, 20 Aug 1862 (Papers p.256)
- f. T to S, 26 sep 1863 (copy)

38. George Gabriel Stokes (1819-1903)

- a. S to T, 6 July 1871
- b. S to T, 20 June 1873, with note of reply sent on 4 July 1873

39. P.S. Tait (1831-1901)

- a. P.G.T. to J.T., 25 April 1870
about atmospheric refraction
- b. P.G.T. to J.T., 14 June 1884
- c. P.G.T. to J.T. 26 June 1884, with note added on the envelope & pencilled comment by J.T. within, dealing with frames of reference
- d. P.G.T. to J.T., 5 July 1884, with note on envelope
- e. P.G.T. to J.T., 30 Sep 1884
- f. P.G.T. to J.T., 19 Jan 1885
- g. P.G.T. to Wm Thomson, 24 Jan 1885
- h. P.G.T. to J.T., 28 Jan 1885 (post-card)
- i. J.T. to P.G.T., 29 Jan 1885 (copy)
- j. P.G.T. to J.T., 29 Jan 1885 (post-card)
- k. P.G.T. to J.T., 5 Feb 1885
- l. P.G.T. to Wm Thomson, 9 Sep 1886
f - l, about Tait's suggested modification of Thomson's isothermal curve
- m. On envelope, "contains letter of Prof Tait of special interest to me, J.T.", enclosing an account of Fischer's work in pencil, in Tait's hand.

40. James Thomson, Senior, (1786-1849)

Copy "From a letter to his father, dated July 18, 1844", about a plan for consumption of smoke

41. Wm Thomson (Lord Kelvin) (1824-1907)

- a. W.T. to J.T., no date, a note of invitation to Cambridge
- b. W.T., to J.T., 26 April ?
With notes by J.T. about modules of elasticity
- b1. W.T. to J.T., 20 Jan 1857
with "receipt for gutta perch & cement" & references to cable-laying
- c. W.T. to J.T. 19 Feb 1862
Headed, in J.T.'s hand, "Hydraulics, Friction or viscosity of water"

- d. W.T. to J.T. 4 March 1870,
Copy of end of letter, with reference to size of molecules
 - e. W.T. to J.T., 22 Oct 1873
about J.T.'s proposed presidency of Section A at B.A. meeting
 - f. J.T. to W.T., 19 July 1878
about units & dimensions
42. Mrs Elizabeth Thomson (formerly Hancock) wife of J.T.

to Jas Thomson, Junior, 22 Nov 1891
43. Frances Anna Thomson, Lady Kelvin (formerly Blandy)
- a. F.A.T. to J.T., 19 Aug ?
Containing message from W.T. about the effect on metals of "Sunday rest"
 - b. F.A.T. to son or daughter of J.T. 17 May 1889, containing message from W.T. about views of Stokes on words, "posture", "?????" & orientation, the postscript of a letter
44. Sylvanus P. Thomson (1851-1916)

Letter to Jas Thomson, Junior, 24 July 1909
Enquiry for S.P.T.'s life of Lord Kelvin
45. W.C. Unwin (1838-1933)
U to T, 8 Feb 18656
Proposed licence to Fairbarin Coy for manufacture of T's turbines
46. John Warner, (American engineer)
- a. W to T, 30 Oct 1863
 - b. W to T, 30 Dec 1863 (with pencilled note about J.T.'s reply)
 - c. W to T, 4 Feb 1864
Letters describing W's visit to Paris & other places
47. Walter White, (Secy. Royal Society)
- a. W to Thos. Andrews, 26 July 1871
 - b. J to W, 28 July 1871, (memo of reply) with reference to T's paper in Pir. Roy. Soc.
48. A.M. Worthington (1852-)

W to T, 6 Feb 1884, with memorandum of reply
with reference to W's work on capillary action
49. Robert Young (1822-1917)
- a. Y to T, 5 Jan 1875
 - b. Y to T. 10 March 1880

15.5 Robert John Kane, (Sir) (1809-1890)

K to J, 4 Jan 1865

with reprint of K's lecture on "Industry in Ireland" from Jour. Society of Arts, 16 Dec 1864

N. MSS of James Thomson, Senior, (1786-1849)

1. 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.
2. MS. book (225 x 180 mm), period of Belfast Professorship (1814-1832). "Public examination of the Junior Mathematical Class, April 26, 1825". 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.
3. Long book (395 x 165 mm) containing class-registers & examination records, Royal Belfast Academical Institution, 1827 to 1832
4. 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
5. 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.
6. 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".

7. MS., sewed in paer 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.

8. 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.
9. Double sheet of MS. (253 x 205 mm)
"Proposed System of Education for the intended Irish Colleges"
10. 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"
11. Copy of inscription on "time -piece" presented by students of year 1835-6