# SILVANUS PHILLIPS

# THOMPSON

F. R. S.

List of correspondence and papers in the

IMPERIAL COLLEGE ARCHIVES

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IMPERIAL COLLEGE OF SCIENCE AND			
TECHNOLOGY			
( University of London )			
List of the papers and correspondence of			
SILVANUS PHILLIPS THOMPSON			
F R S			
preserved in the Imperial College Archives			
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SILVANUS PHILLIPS THOMPSON, F. R. S.

1851 - 1916.

 $\mathcal{J}(x) = \{x_1, x_2, \dots, x_n\}$  , where  $x_n \in \mathbb{N}^n$  and the

Professor Thompson was a student of the Royal College of Chemistry from 1875 - 1876, and the first Principal, and Professor of Applied Physics and Electrical Engineering, at the Finsbury Technical College, from 1885 until his death. The College was administered by the City and Guilds College, one of the constituent Colleges of the Imperial College.

Silvanus Thompson showed at an early age great vigour and breadth of mind, considerable literary and artistic talent, and untiring industry that never abated throughout his life... the coincidence of Thompson's scientific life with the inauguration of the age of electrical engineering gave an irresistible opportunity for the exercise of his special talents. The attained the position of a pioneer in the development of applied electricity... His public lectures attracted large audiences and aided greatly in promoting technical education, especially in electrical engineering. Thompson pursued with zest his literary, antiquarian and artistic tastes... He was a skilful painter especially of Alpine scenery, and an accomplished linguist. He came of Quaker stock and was throughout his life an earnest member of the Society of Friends, in which he was recognised as a minister in 1903.

These extracts from the biographical notice in the 'Dictionary of National Biography' give some impression of the Professor's importance in the history of electrical engineering and also indicate the breadth and versatility of his talents and interests.

Miss Helen G. Thompson, one of the four daughters of the Professor, presented his correspondence, some valuable items from his famous library, and a number of his own publications, to the Imperial College, in 1962. A description of the books does not come within the scope of this list, but they include a first edition of the 'De Magnete' of William Gilbert, and the beautiful facsimile translation of this work, produced for Gilbert's tercentenary by Professor Thompson and his fellow members of the Gilbert Club. The Professor was an enthusiastic bibliophile, and as 'Brother Magnetizer' was a member

of the 'Sette of Odde Volumes', in which he played a prominent part. He was of course also a distinguished member of the many professional societies to which he belonged, some of which he helped to found. He was President at different times of the Röntgen Society, the Institute of Electrical Engineers, and the Physical, Optical and Illuminating Engineering Societies.

The Imperial College is most grateful to Miss Thompson for this generous gift.

Jeanne Pingree, College Archivist, March, 1967.

## LETTERS, etc.

The correspondence listed here includes letters written by and to S. P. Thompson, and also items from his collection of manu-scripts. Lady Wilson, daughter of Richard Phillips, gave Thompson the letters which Faraday wrote to her father.

The Professor also possessed autographs collected by his father and grandfather, which may have included the letters by Ampère and Volta, etc.

Unless described otherwise, all the letters are holograph letters, a note being given of typewritten letters. The description 'dictated' indicates the employment of an amanuensis. Some of the letters relating to the Kelvin biography are arranged in a book.

A reference is given for any letters which are printed or quoted in 'Silvanus Phillips Thompson. His life and letters' by J. S. and H. G. Thompson, published in 1920 by Fisher Unwin and referred to in this list as the 'Life'. Letters used in the biography of Lord Kelvin, published in 1910, are also noted.

The compiler is indebted to Mrs. Magda Whitrow and Dr. Umberto Ratti for their help in translating the letters.

The following abbreviations have been used: -

- B.A. British Association for the Advancement of Science.
- F.T.C. Finsbury Technical College.
- I.E.E. Institution of Electrical Engineers.
- p.m. Postmark.
- P.B.S. President of the Royal Society.
- R.S. Royal Society.

#### IMPERIAL COLLEGE ARCHIVES.

List of correspondence and papers of S, P. THOMPSON.

ADDENDUM, p. 17.

FARADAY, Michael. 1791 - 1867.

The following letters were written to Dr. Richard Phillips (1778 - 1851) References are given for those printed in 'Michael Faraday; his life and work', by S.P. Thompson, published by Cassell in 1898.

439. July 10, 1830. Analyses a packet of alkali sent by RP; his opinion of the comparative powers of soda and potash in their action on organic bodies.

440. June 21, 1831. His anxiety about the progress The same. 'Life', of RP's affairs; does not require payment for his professional advice.

441. September 23,1831. Comments on a letter from RP to Dr. Reid; 'am busy just now again with Electro-Magnetism and think I have got hold of a good thing!

442. October 15, 1834. Will write a paper for the The same. Philosophical Magazine for Phillips.

443. January 22, 1835. Memorandum; reply to state-1-10. The same. ments made by Dr. Davy, that he had claimed the discoveries of Sir H. Davy as his own.

444. October 10, 1835.

The same.

ABEL, Sir Frederick Augustus. 1827 - 1902.

1. March 3, 1885.

Congratulates SPT on his appointment as Principal of the F.T.C. [See 'Life', p. 130.]

ALLBUTT, Sir Thomas Clifford. 1836 - 1925.

2. February 4, 1912. Cambridge.

Postcard. Acknowledgement of SPT's offer of copies of translations of 'De Magnete' and 'Gilbert, Physician'.

ALVERSTONE, 1st Viscount. See WEBSTER, Sir Richard Everard.

AMPÈRE, André Marie. 1775 - 1836.

438. June 16, 1828. Paris.

In French. Gives permission to M. Bachelier to obtain packet of his papers from a library.

AYRTON, Hertha. Mrs. W.E. Ayrton, née Marks.

12. July 16, 1893. 41, Kensington Park Gardens. Enquiry about feeding arc lamps in vacuum; asks for loan of apparatus if possible.

13. August 2, 1895. Suffolk.

Enquiry about experiments on electric arc; also on SPT's method of measuring the length of the arc.

14. January 8, 1896.41, Kensington Park Gardens. Acknowledgement of copy of Cantor lectures; interpretation of results of phenomena of the crater-current relationship.

15. January 18, 1900. The same.

Acceptance of an invitation to a meeting of the 'Odde Volumes'.

16.

Photograph of Mrs. Ayrton.

14a. September 8, 1900. The same.

Thanks SPT for supporting admission of women to the committees of the B.A. (The letter is bound in the copy of E. Sharp's biography of Mrs. Ayrton in the Thompson Collection.)

See also AYRTON, William Edward. 6.

# AYRTON, William Edward. 1847 - 1908.

3. February 14, 1883. 74, Queen Street.

Enquiry about publications by Deprez on governing motors. Reply from SPT on back of sheet.

4. February 16, 1885. 68, Sloane Street.

Describes his 'periodic 'governor; does not think that Deprez solved the converse of his dynamo governing problem.

5. June 17, 1891. Central Institution. Advises the appointment of C.G. Lamb to Leicester.

6. January 25, 1895. 41, Kensington Park Gardens. Possible misunderstanding by Mrs. Ayrton of statement in SPT's first Cantor lecture, on the relative sizes of crater and current, which has not been proved by her own experiments.

7. May 9, 1899. Central Technical College. Arrangements for the participation of the staff of the C.T.C. and F.T.C. in laying of foundation stone [ for the Victoria and Albert Museum. ]

8. October 27, Central Technical College. Description of the circumstances of the appointment of Greenslade to post in Cork.

9. February 5, 2, Upper Phillimore Gardens. [before 1891.] Asks SPT to send a copy of Air Pump paper to an American firm.

n.d.41, Kensington Park Gdns.

Special thanks for Christmas card, designed by SPT.

December 30,20, Lower Road Garden,Brighton.

Asks for material on American technical colleges and details of any electrotechnical laboratories.

BAKER, John Gilbert. 1834 - 1920.

June 19, 1916. 3, Cumberland Road, Kew. To Mrs. Thompson. Letter of condolence on the death of SPT.

BANTI, Angelo.

17. June 29, 1902. Rome. Typewritten. In French. Has published the results of his researches on 'le Coherer Castelli'; enquires about articles on the 'pettogolezzo' about which Marconi spoke when in England.

BARLOW, Thomas.

18. February 10,
The Athenaeum.

Asks SPT to vote for his son James Alan Barlow at the next Athenaeum election.

BARNARD, Jane.

506. February 8, 1910. 12, Highbury Terrace, N. Thanks for copy of the 'Life of Kelvin.'

BARRETT, Sir William Fletcher. 1844 - 1925.

19. [ 1878 ]

Congratulations on success in London University [award of D.Sc.]; unable to give him a room for the B.A. meeting; insanity of his sister-in-law; invitation to dinner.

- 20. November 10, 1879.
- 1-2. Royal College of Science, Dublin.

Thanks for a pamphlet [on Technical Education?] with comments on it; desire of 'artisan classes' for knowledge; importance of systematic instruction for trade apprentices; unsuccessful experiment with telephones; hopes that Letts may obtain new post.

- 21. December 11, 1879. The same.
- Testimonial for the Chair of Physics at Josiah Mason's College.
- 22. April 20 [ 1882 ] The same.
- Successful results using a Reis receiver and his transmitter; his participation in a lawsuit about a specification of Edison's.
- 23. February 16, [1885.] The same. See 'Life' p. 129.
- Withdrew his application for the F.T.C. post when he heard that SPT was applying for it; has spoken to Magnus on his behalf; Armstrong's attempts to secure the appointment of a chemist.
- 24. [1896?]
  6, De Vesci Terrace,
  Kingstown, Dublin.
- Regrets that he cannot be present at a lecture of Thompson's; refers to his experiments on the perception of luminosity in a magnetic field, with details of his published results.
- 25. December 8,
  Royal College of Science,
  Dublin.

Is lecturing on 'the Electric Light' and hopes he may call on SPT if he finds himself short of experiments; admiration of SPT's latest book; hopes that SPT's 'secondary batteries' will be 'the primary of them all.'

26. December 13, The same. Appreciation of SPT's book [unnamed.] Suggests arrangements for its sale; enquires how much he owes SPT for slides of Edison's machine, Swan lamps etc.; asks for copies of slides of dynamo machines, etc.

BARRY, Sir John Wolfe. 1836 - 1918.

27. January 31, 1913. Delahay House, Chelsea. Asks if SPT is willing to be appointed as Professor of Applied Physics by the University of London.

BARWICK, George Frederick. 1853 - 1931.

28. June 18, 1914. British Museum. Thanks for sending copy of the 'Rose of the winds.'

BEALE, Dorothea. 1831 - 1906.

29. March 1, 1880. Ladies' College, Cheltenham. Arranges possible dates for a course of lectures on 'Heat' by SPT.

BECQUEREL, Antoine Henri. 1852 - 1908.

139. January 19, 1902. 6, Rue Dumont d'Urville, Paris. In French. Will come to a reception at SPT's home in March, when he hopes to arrive in England.

140. December 25, 1902. The same.

In French. New Year greetings. Touched to have seen letters by his father and grandfather in SPT's collection; sends photographs of their portraits; recalls seeing his grandfather write the letter to Valipocelli now in SPT's possession, at their country home; set up the experiment which Valipocelli came to see there, himself.

141. December 2 [?] 1908. The same.

Postcard, in French. Photograph of Becquerel's country home, referred to in 140. Thanks for greetings.

142. December 23, 1908. The same.

From Mme. Becquerel, in French. Thanks SPT for condolences on the death of her husband; is glad that he has written an obituary notice which she will try to see.

143. December 27, 1908. Paris.

Mourning visiting card of Mme. Becquerel. Thanks for copy of memorial notice in 'Nature.'

144.

Copy of photograph of Antoine César Becquerel.

145.

Two copies of photographs of Alexandre Edmond Becquerel.

BEHREND, Bernard Arthur. 1875 - 1932.

572. March 27, 1901.

1-2. Cincinnati, Ohio.

Typewritten. Appreciation of reference to his work in 'Polyphase electric currents', mentions a few points which seem to him to be incorrect, in descriptions of Oerlikon motor, etc.

BELL, Alexander Graham. 1847 - 1922.

30. March 7, 1879. 1509, Rhode Island Avenue, Washington, D.C. Partly quoted, 'Life', p. 108. Letter written by 'A.E.R.' Replies to enquiry; experiments made with two pair telephones made in London in 1878, are not yet published, but he has expanded his researches which he will shortly communicate to the American Academy of Sciences. Is writing History of Telephony; describes a case of binaural audition and gives references; mentions recent foundation of the American Journal of Otology and its contributors.

31. December 27,1879.
904,14th Street NW,
Washington, D.C.Partly
quoted, 'Life', p. 109.

Hopes that SPT will have time to carry on his valuable researches in Bristol, and not have to seek for a professorship elsewhere. Mentions a forthcoming article on Binaural Audition in the Journal of Otology.

32. January 30, 1880.1-4. Washington, D.C.Quoted, 'Life', p. 109.

Written by 'A.E.R.'. Will send advance copy of his paper on Binaural Audition; would like to have details of instrument for compound analysis when possible; mentions his arrangements for a siren, devised in 1874. Refers to high reputation of Hoboken Institute; has written to its President for an explanation of some affair alluded to by Thompson.

33. October 28, 1880.
Metropolitan Hotel,
Rue Cambon, Paris.

Dictated. Sends copy of 'La Nature'with drawings of photophone; describes working of apparatus in great detail; diagrams.

34. November 20, 1880. Langham Hotel, London. Hopes that SPT will not allow personal feeling to prevent him from lecturing on the photophone.

November 28, [1880?] 35. Metropolitan Hotel, Paris.

Dictated. Interested in press notices of SPT's lecture on 'Waves of sound' and improved phonograph.

BIDWELL, Shelford. 1848 - 1909.

May 26, 1887. 48. Riverstone Lodge, Wandsworth.

Thanks for copy of 'Lessons in Electricity.'

# BIRKELAND, Kristian. 1867 - 1917.

36. April 18, 1910. Chistiania.

Interested in SPT's study of physiological effect of an alternating magnetic field, mentions where he has seen this effect; is about to trace any effects of Halley's comet, in Finmarken.

February 13, 1910. 529. Christiania.

Thanks for copy of the 'Life of Kelvin.'

# BJERKNES, Carl Anton.

December 30, 1879. 37. Christiania.

In French. Writes in detail to explain his theories on hydroelectricity.

March 7, 1880. 38. Christiania. 1-6.

1-3.

In French. Further details about his researches in hydroelectricity; with seven small sheets of diagrams, in pencil, in illustration.

The two letters above are enclosed in an envelope on which Thompson wrote: 'Manuscript of C.A. Bjerknes on his Hydrodynamic experiments.'

## BODINGTON, Sir Nathan. 1848 - 1911.

November 16, 1908. 51. Woodbourne, North Hill Road, Leeds.

Thanks for congratulations [ on knighthood. ]

# BOISTEL, Ernest.

February 15, 1903. 41. 62, Rue Madame, Paris.

Typewritten, in French. Sends list of errata in 'Design of Dynamos.'

42. February 12, 1904. 66, Rue de Vaugirard, Paris. Typewritten, in French. Needs metrical tables from Germany to complete his translation of the 'Design of Dynamos.'

43. October 16, 1905. The same.

Typewritten, in French. Regrets SPT's ill health. Has had no supplementary papers for his recent translation.

540. February 16, 1910. The same.

Typewritten. Thanks for copy of the 'Life of Kelvin.'

#### BOTTOMLEY, James T.

495. February 9, 1910. 13, University Gardens, Glasgow. Thanks for copy of the 'Life of Kelvin.'

498. February 19, 1910.

1-2. The same.

From Mrs. Bottomley. Admiration for the 'Life.' [A page appears to be missing; it probably referred to Lady Kelvin's dislike of the photographs of Lord Kelvin.]

497. February 23, 1910.

1-2. The same.

From Mrs. Bottomley. Arrangements for smoothing over difficulties about Miss King's photograph of Lord Kelvin, which Lady Kelvin particularly disliked; further admiration of the 'Life.'

496. June 16, 1915.

1-3. The same.

Typewritten. Can give no information about a sonnet written about Lord Kelvin, but will arrange a search for it in the library; is busy providing periscopes and aviation compasses for the war effort.

# BOUSFIELD, Sir William. 1842 - 1910.

573. October 27, 1884. Inner Temple.

Joint opinion, with Henry James, on SPT's 'Valve Telephone', which they did not hold to be an infringement of the Bell and Edison patents.

# BOYD, Stanley.

44. October 14, 134, Harley Street. Thanks for an unnamed brochure.

BOYS, Sir Charles Vernon. 1855 - 1944.

45. August 12, 1915.

1-2. Metropolitan Gas Referees, 66, Victoria Street. An enquiry about the alleged necessity for moderate acceleration in firing mechanism in some unspecified weapon [perhaps a trench mortar?] which he was designing.

BRAMWELL, Sir Frederick Joseph. 1818 - 1903.

87. October 26, 1898.

1-2. 5, Great George Street, S.W.

Typewritten. Discussion of the character of the Royal Institution and its possible liability for parochial rating if described as a 'Club'; returns proof slip from Chapter II of a new work by SPT and asks if references to the Institution can be re-worded.

BRIGHT, Sir Charles. 1863 - 1937.

542. February 10, 1910. Caxton House, S.W.

Thanks for copy of the 'Life of Kelvin.'

BROWN, C.E.L.

574. February 10, 1900.

Brown, Boveri & Cie.,

Baden and Frankfurt.

Typewritten. Expression of appreciation of 'Polyphase Electric Currents.'

BRYCE, James. 1st Viscount Bryce. 1838 - 1922.

49. February 14, 1907.
On board H.M.S.
'Oceanic.'

Thanks for kind greetings and reference to his 'Flora of Annan.'

BURDON - SANDERSON, Sir John Scott. 1828 - 1905.

286. December 21, 1879.

Testimonial in favour of SPT's application for the Chair of Physics at Mason's College, Birmingham.

BURKITT, Francis Crawford. 1864 - 1935.

46. October 12, 1907.

1-2. Grange Road, Cambridge. Asks for title of SPT's forthcoming paper at the Cambridge Theological Society.

47. June 6, 1912.

1-2. Westroad Corner, Cambridge.

Afflictions of May Week; comments on passage from Timothy, Corinthians, etc., in the Greek Bible.

BYWATER, Ingram. 1840 - 1914.

50. November 21, 1907. 6, Norham Gardens, Oxford. Declines invitation to dine with the 'Odde Volumes.'

CALLENDAR, Hugh Longbourne. 1863 - 1930.

52. September 20, 1907. 49, Grange Road, Ealing. Refers SPT to his statement on Griffith's claims to the Rumford medal, which should be of help in some unspecified matter.

CARDANI, Pietro. 1858 - 1924.

53. December 29, 1899. Istituto Fisico, Parma.

In Italian. New Year greetings.

CARDEW, Philip. 1851 - 1910.

54. November 28, 1888. 1-2. Electrical School, Chatham. Asks if SPT can lecture on electrical engineering to the R.E. officers at Chatham; gives details of time, etc.; comments on misstatement in 'Dynamo Electric Machinery' about his method of testing dynamos for efficiency, which is not, as alleged in that book, a modification of Hopkinson's method.

CARHART, Henry Smith. 1844 - 1920.

55. February 23, 1896.

1-2. University of Michigan.

Typewritten. Jokes about the use of the word 'rotatory.' Mentions books he is writing or has written; Rowland's work on Röntgen photography.

56. October 29, 1908.
Piccadilly Hotel,
London.

Thanks for copies of Thompson's books.

460. July 23, 1916.

1-2. Pasadena, California.

To Mrs. Thompson. Letter of condolence on the death of SPT.

CHANNING, William Francis. 1820 - 1901.

267. June 29, 1883. Providence, Rhode Island. Describes the scope, etc. of his review of SPT's biography of Phillip Reis, for the 'Popular Science Monthly', and hopes that SPT will like it; refers to the Bell telephone monopoly in the States and to the 'frightful exactions' on the public.

CHRISTIE, Sir William Henry Mahoney. 1845 - 1922.

57. January 10, 1906. Royal Observatory, Greenwich. Declines an invitation to become President of the Optical Society.

CLIFTON, Robert Bellamy. 1836 - 1921.

58. January 10, 1889.
Portland Lodge, Park
Town, Oxford.

Thanks for papers. Comments on SPT's account of the mercurial air pump.

CLODD, Edward. 1840 - 1930.

59. February 15, 1908. Savile Club.

As Chairman of the Rationalist Press Association asks SPT to write a History of Physics, as part of a projected series on the history of the sciences.

COALES, John Dennis. 1876 - 1942.

461. June 16, 1916. 4, Sion Road, Twickenham. To Mrs. Thompson. Letter of condolence on the death of SPT.

COCKERELL, Sir Sydney. 1867 - 1962.

601. October 28, 1911. Fitzwilliam Museum, Cambridge. Thanks for photographs of the Gilbert portrait; he questions its genuineness, as the inscription seems dubious to him.

60. June 15, 1914. The same.

Thanks for SPT's paper on the compass card.

CONYNGHAME, Henry.

61. n.d. The Temple.

Sends a copy of a book [ on electricity?] which he has written from a legal point of view; expresses his appreciation of a book by SPT which has been very useful.

COOKE, Conrad W. See GILBERT CLUB.

CORMACK, John Dewar. 1870 - 1935.

515. February 8, 1910. University College.

Thanks for copy of the 'Life of Kelvin.'

CORTI, Antonio.

All letters written in Italian, from Como, in 1803, to Carlo Raimondi. See also the letter by Alessandro Volta, (446) about the purchase of the house mentioned in these letters.

448. April 16.

449. May 7.

450. May 20.

451. June 1.

452. June 15.

453. June 22.

454. July 31.

455. August 26. 456. October 13. agent or bailiff in Raimondi's service. These letters discuss the possible sale of a house and other property belonging to Raimondi, at Como. The Volta

Corti appears to have been an

brothers' offer of 27,000 lire

for the house is mentioned.

CREAK, Ettrick William. 1835 - 1920.

62. November 30, 1906. 6, Hervey Road, Blackheath. Thanks for the translation of 'Peregrinus'; comments on the improvement of the compass by Peregrinus.

CRICHTON - BROWNE, Sir James. 1840 - 1938.

63. October 15, 1880.

Thanks for corrected proofs for a contribution to 'Brain.'

63a. 1-2.	April 4, 1910. The Athenaeum.	Expresses his interest in SPT's discovery of a new application of magnetism 'which opens up an entirely new field.' Photograph enclosed, showing SPT with his head enclosed in some large piece of apparatus.	
459.	June 18, 1916. 45, Hans Crescent.	To Mrs. Thompson. Letter of condolence on the death of SPT.	
CROOKES, Sir William. 1832 - 1919.			
64.	June 20, 1876. 20, Mornington Road, London, N.W.	Offers to replace some broken bulbs; will ask Dr. Guthrie what type of instrument he requires.	
65.	September 5, 1878. Quarterly Journal of Science.	Would like an article by SPT on 'Priority in scientific discovery'-refers to account of a dispute between himself and M. Lamy.	
66.	May 5, 1887. 7, Kensington Park Gardens.	Arrangements for meeting.	
67.	June 23, 1888. The same.	Typewritten. Invitation to call.	
<b>6</b> 8.	April 23, 1889. The same.	Typewritten. Invitation to dinner to meet Oliver Lodge.	
69.	December 23, 1890. The same.	Typewritten. Thanks for pointing out Boltzmann's theory; mathematical error in one of his R.S. papers.	
70.	October 18, 1894. The same.	Postcard. Acceptance of dinner invitation.	
71.	June 2, 1896. The same.	Typewritten. Covering note for collection of published papers; is testing metallic uranium against platinum as radiator of the unknown X.	
72.	April 8, 1897. Hotel Continental, Paris.	Has seen Moisseau melt titanium; describes experiment and its effects.	
73.	January 1, 1902. 7, Kensington Park Gardens.	Typewritten. Thanks for copy of the 'De Magnete' translation; is still experimenting on 'electrons.'	

74. March 25, Morland, Chislett Road. Printed in 'Life', p. 236. SPT to Sir William. Suggests possible titles and subjects for his two forth-coming lectures at the Royal Institution.

75. May 16, 1903. Kensington Park Gardens. Typewritten. Sends some tickets.

76. October 30, 1903. The same.

Typewritten. Declines dinner invitation, and regrets that he will not therefore hear the views of the 'Magnitiser' (sic) on Radium.

77. May 8, 1905. The same.

Enquiry about the possibility of similarity of crystallisation in fluor spar, spinels and diamonds.

78. April 12, 1906. The same.

Typewritten. Celebrations of his golden wedding; regrets SPT's absence; thanks for gift of watercolour. [See 'Life'p. 308, for a description of this painting.]

79. November 27, 1907. The same.

Typewritten. Thanks for portrait of SPT.

80. May 23, 1909. The same.

Postcard. Note about spinthariscope.

81. July 9, 1910. The same.

Thanks for congratulations on knighthood.

82. June 19, 1912. The same.

Thanks for good wishes on 80th birthday.

83. September 7, 1915.

Lion Mansion Hotel,
Brighton.

Acknowledgement of sympathy on death of son; staying in Brighton for Lady Crookes' health.

84. April 17, 1916. Kensington Park Gardens. Typewritten. Thanks for congratulations on Diamond wedding.

85. November 8, 1916. The same.

Typewritten. To Mrs. Aggs. Note about return of painting by SPT.

86.

- 1. Photograph of Sir W. Crookes from supplement to 'Nature', November 7,1907.
- 2. Birdseye views of society, no. XV. Science and art conversazione. Print.
- 3. 'A merry meeting at the Royal Institution, Albemarle Street. 'Print, of drawing of demonstration by Huxley.

462. June 14, 1916. London.

Postcard. To Mrs. Thompson. Sympathy etc. on the death of SPT.

CRUM, Jessie.

494. February 9, 1910.
Danefield, Largs,
Ayrshire.

Thanks for copy of the 'Life of Kelvin.'

503. February 16, 1910.

1-3. The same.

Admiration of the 'Life'; comments on SPT's description of her sister, Kelvin's first wife; dislike of Sir Edward Fry's letterinvol. 2, p. 1095, and his references to Kelvin's Episcopalian views, which she explains to be mistaken.

CRUM - BROWN, Alexander.

505. February 12, 1910. 8, Belgrave Crescent, Edinburgh. Thanks for copy of the 'Life of Kelvin.'

CURIE, Pierre. 1859 - 1906.

88. May 6, 1903. Faculté des Sciences de Paris. In French. Thanks for copy of the "Life of Faraday."

89.

Photograph of Pierre Curie.

DALBY, William Ernest. 1862 - 1936.

91. October 19, 1918. Ealing. See 'Life', p. 142. Typewritten. To Mrs. Thompson. Describes work and influence of SPT at Finsbury.

DALTON, Ormonde M. 1866 - 1945.

90. June 15, 1914. British Museum. Postcard. Thanks for copy of the 'Rose of the Winds.'

DARWIN, Sir George. 1845 - 1912.

92. October 28, 1908.
Newnham Grange,
Cambridge.

Sends letters from Lord and Lady Kelvin; mentions one heparticularly values.

93. October 2, 1909. The same. Partly quoted,'Life',p. 293. Comments on a portion of the M.S. of Kelvin's biography.

509. February 8, 1910. The same.

Thanks for the 'Life of Kelvin.'

DAVIDSON, Sir James Mackenzie. 1856 - 1917.

94. December 14, 1911. 26, Park Crescent, Portland Place. Thanks for demonstration by SPT's assistant, Mould, of the visual effect of a powerful alternating magnetic field; regrets missing him.

95. February 29, 1912. The same.

Regrets having to decline invitation to meeting of the Röntgen Society.

96. January 12, 1915. The same.

Enquiry about telephone; winding and resistance required for voltage of 1 - 1.75, to give best results in method of tracing bullets in wounded, after localisation by X - ray.

DEWAR, Sir James. 1842 - 1923.

468. June 13, 1916. Royal Institution.

To Mrs. Thompson. Letter of condolence on the death of SPT.

DICKINS, Frederick Victor. 1838 - 1915.

551. June 28, 1910. Seend Lodge, Wilts.

Admiration of the 'Life of Kelvin.'

DICKSON, James Douglas Hamilton. 1849 - 1931.

378. August 1, 1929. 6, Cranmer Road, Cambridge. To Mrs. Thompson. Returns the letters written to him by SPT, about the biography of Kelvin.

356 - Correspondence between Dickson and SPT from June 1908 to 377. August 1909, about details in the Kelvin' Life.' [See the 'Life of Kelvin', p. 286 onwards for quotations from these letters.]

507. February 8, 1910. 6, Cranmer Road, Cambridge. Appreciation of SPT's allusions to his help in the 'Life of Kelvin', and his pleasure in giving it; recent marriage of his daughter.

DU BOIS, Henri E.J.G. 1863 - 1918.

39. July 29, 1893.

1-2. Mittelstrasse 39, Berlin. Asks permission to copy figures in SPT's Dynamo Electric Machinery for a forthcoming book on magnetic circuits. Unable to attend 'World's Congress of Electricians'.

40. March 16, 1910.

1-2. Bosschalaboratorium, Berlin. Hopes to attend B.A. meeting. Discusses a magnetic point.

535. March 6, 1910. The same.

Thanks, and comments, on recipt of 'Life of Kelvin': enquiry about B.A. meeting; age of Sir Joseph Swan; describes his methods with large electromagnets of high saturations using as many windings as possible, about which he asks SPT's opinion.

DUDDELL, William. 1872 - 1917.

97. March 1, 1907. 47, Hans Place, S.W. Thanks for the trouble taken by SPT in bringing about his selection [for election to the Royal Society].

98. August 9, 1914. The same.

Expresses pleasure that SPT will give paper to the O[dde] V[olumes]. Asks whether he has been able to return home [from abroad].

See also MARCONI, Guglielmo.

DYSON, Sir Frank Watson. 1868 - 1939.

99. January 5, 1915. Royal Observatory, Greenwich. Thanks for congratulations on his 'good luck' [knighthood in New Year Honours].

EVANS, Sir John. 1823 - 1908.

100. March 9, 1897. Nash Mills, Hemel Hempstead. Note: 'I have at last run the bombinating Chimaera to earth in Rabelais LL. 7. Enclosed is a note from my brother which you may like to see'. [No enclosure].

EWING, Sir James Alfred. 1855 - 1935.

575. May 29, [must be between 1914-16]. Froghole, Edenbridge.

Would like to discuss SPT's paper on Hysteresis Loops.

527. February 13, 1910. The same.

Thanks for copy of 'Life of Kelvin'.

FERRANTI, Sebastian Ziani de. 1864 - 1930.

101. January 2, 1892. London.

Typewritten. Postpones appointment. Mentions proposal for 'street boxes (automatic) transformers', for sections of the City.

FISHER, Sir John. 1st Baron Fisher of Kelverstone. 1841 - 1920.

102. No address; crested paper, Admiralty, Whitehall; endorsed 12 Nov 1908. Dated by Fisher, 12.11.

In pencil. Postpones appointment.

538. February 14, 1910. Kilverstone Hall, Thetford.

Thanks for copy of 'Life of Kelvin'.

FITZGERALD, George Francis. 1851 - 1901.

105. December 12, 1881.
Trinity College,
Dublin.
A few lines quoted,
'Life', p. 90.

Thanks for book [Electricity and Magnetism]; criticism of two points; too large for his needs as elementary textbook, and no explanation is given why porous cell is required in Daniel's battery. Likes general chapters at beginning of book. Dwells on dreadful state of Ireland; difficulty of collecting rents, etc.

106. January 5, 1897. Co. Westmeath.

Unsuccessfully trying to see Trotter effect: discusses possible mistake in rate of revolution; gives details of experiments trying different rates of revolution, etc. FLEMWELL, George Jackson. 1865 - 1928.

103. August 1, 1914. Arveyes.

Writes at some length about the impending horrors of war and the guilt of European rulers. Describes his recent painting of alpine flowers and scenery.

FORBES, George, F.R.S. 1849 - 1936.

104. February 15, 1895. Athenaeum.

Regrets that he cannot let SPT see plans of Niagara Dynamo owing to various circumstances, but they will shortly be published.

FOSTER, George Carey. 1835 - 1919.

107. February 19, 1882. Sabden, Lancs.

Is glad to propose SPT as Telegraph Engineer. Thanks him for book on Electricity which he praises.

Thanks for new edition of 'Electricity'.

FOSTER, Sir Michael. 1836 - 1907.

109. October 21, Shelford, Cambs.

Discusses the possible muscular character of cells in the spiral ligament of the ear.

FRANKLAND, Sir Edward. 1825 - 1899.

110. December 19, 1879.
Royal College of
Chemistry,
Kensington.

A testimonial expressing the Professor's opinion of SPT's fitness for a professorial chair of Physics, based on his own personal observation.

111. December 15, 1881. Science and Art Dept. paper.

Thanks for book on 'Electricity and Magnetism'. Describes storage batteries which he has been using, 'this will doubtless give quite a fresh impulse to the storage of force'.

March 2, 1884.
Normal School of
Science, Kensington.

Has not parted with patent rights but is granting licenses. His batteries are now constructed without metallic plates FRAZER, Sir James George. 1854 - 1941.

113. December 12, 1914.

1, Brick Court,

Middle Temple,

London.

Postcard; thanks for leaf of the Yardley oak. Welcomes any connection with Cowper, 'whom I love and venerate as a man and a writer'.

FREEMAN, Ernest Carrick. 1860 - 1932.

604. November 6 [1911], Tymperleys, Colchester. Asks for copy of photograph of the Gilbert portrait; lives in house where Gilbert was born.

605. November 8 [1911]. The same.

Thanks for portrait, sends photograph of the house.

FRY, Sir Edward. 1827 - 1918.

114. March 29, 1907. Failand House, Bristol.

Postcard. Has signed a nomination paper [subject unnamed].

114a. January 6, 1908. The same.

Has some interesting letters from Kelvin which SPT might like to use for his forthcoming biography.

115. November 15, 1909. The same.

Thanks for copy of extract from letter which SPT intends to publish. Reference to Kelvin's failure to understand the mechanism of Bell's telephone when he showed it at Glasgow.

116. November 16, 1909. Morland, Chislett Road. From SPT to Sir Edward. Draft. Gives his own impression of Kelvin's failure to comprehend action of receiver and apparent inconsistency of his attitude; asks Sir Edward if he has treated Kelvin unfairly in his account of the matter, which he has tried to make as unprejudiced as possible. Diagram of 'Glasgow receiver'.

510. February 8, 1910. Bristol.

Dictated. Thanks for copy of the 'Life of Kelvin'.

See also, CRUM, Jessie. 503.

FULLER, Frederick. 1819 - 1909. See THOMSON, William. Lord Kelvin. 348 - 355.

GEDDES, Sir Patrick. 1854 - 1932.

117. December 21, 1907. More House, Cheyne Walk. Thanks for 'Faraday'; reciprocates Christmas greetings; would like to understand what 'you strange magicians of physics have been up to' and to interest SPT in his developing conception of a civic academic life.

GEIKIE, Sir Archibald. 1835 - 1924.

119. November 26, 1907. Shepherds Down, Haslemere, Surrey. Accepts invitation to meet members of the South Eastern Union of Scientific Societies.

120. September 28, 1915. The same.

Unable to attend meeting of the Committee on the Catalogue of Scientific papers. Expresses regret at resignation of Dr. McLeod but sees its necessity. Comments on SPT's Report.

GÉRARD, André Eric. 1856 - 1916.

552. June 2, 1911. 35, Rue St. Gilles, Liege. In French. Postcard; acknowledges the gift of the 'Life of Kelvin'.

121. May 18, 1915.1-2. Nieuwe of Litteraire Societet,The Hague.

In French. Expresses appreciation of English sympathy for the misfortune of his fellow countrymen. Thanks SPT for helping him to be elected honorary member of I. E. E. Feels he will be more useful staying in Holland than returning to Belgium where the university will be moribund during the Occupation. Is able to write to colleagues still in Belgium or in exile.

## GILBERT CLUB.

475. October 19, 1916. Hampstead. From the Secretary, Conrad W. Cooke, to Mrs. Thompson. Letter of condolence.

See also THOMPSON, Silvanus Phillips. 608.

GILL, Sir David. 1843 - 1914.

122. November 16, 1907. Braeknowe, Dundee.

Unable to dine with 'Sette of Odde Volumes'.

123. March 10, 1908. 34. De Vere Gardens. Able to dine with Sette owing to unforeseen cancellation of previous engagement.

124. July 1, 1912. The same.

Comments on suitability of Schuster as Secretary of the Royal Society. Has broader, more practical qualities than other candidates. Will try to influence other members of Council on his behalf.

GLADSTONE, Florence M.

501. February 8, 1910. 19, Chepstow Villas, Bayswater. Thanks for copy of the 'Life of Kelvin'; illness of Ramsay Macdonald's mother.

GLADSTONE, John Hall. 1827 - 1902.

126. December 7, 1878. 17, Pembridge Square. Comments on SPT's plan for an elementary scientific manual.
States that School Board has passed his 'Scheme of Object lessons'.

127. December 16, 1879. The same.

Testimonial for post of Chair of Physics at Josiah Mason College; comments on SPT's particular qualities, original work, clarity of exposition, interest in technical education.

128. January 24, 1885. The same.

SPT may use him for referee for Finsbury post and he will try to speak to Perkin; is working on refraction and dispersion of the essential oils.

129. March 3, 1885. The same.

Congratulations on obtaining Finsbury post.

130. June 9, Sidmouth House, Reading. Thanks for photographs of SPT and Mrs. Thompson.

GRASSI, Francesco.

464. June 22, 1916. Via Bassi, 2 Milan. In Italian. To Mrs. Thompson; letter of condolence on death of SPT.

GRASSI, Guido.

553. October 5, 1911. Via Cernaia 40, Turin. Typewritten in Italian. Thanks for copy of the 'Life of Lord Kelvin'.

GRAWINKEL, Auguste.

125. July 6, 1894. Berlin.

In German. Printed announcement of the death of her husband, Carl Grawinkel, who translated a number of SPT's books.

GRAY, Albert A.

517. February 8, 1910. 14, Newton Terrace, Glasgow. Thanks for copy of the 'Life of Kelvin'.

GRAY, Andrew. 1847 - 1925.

512. February 8, 1910. The University, Glasgow. Thanks for copy of the 'Life of Kelvin'.

GREENSTREET, William John. 1861 - 1930.

554. June 21, 1910. 1-2. The School House, Marling School, Stroud, Glos. Typewritten. His enthusiasm for the 'Life of Kelvin'; reasons for wishing to meet SPT. Would like to consult him while preparing a series of memoirs on famous mathematicians, etc.

GREGORY, John Walter. 1864 - 1932.

536. March 24, 1910. 4, Park Quadrant, Glasgow. Apologies for delay in acknowledging receipt of the 'Life of Kelvin'; comments on the opinions and statements of university students on Kelvin as a teacher.

# GRUN, E

131. September 11, 1902 [3?] Southwick, Brighton.

An enquiry about various points in SPT's translation of Lummer's 'Optics.'. Questions formulae of von Seidel; Gauss' theory of entrance and exit pupil, etc.

132. Note date, but must be the answer in reply to 131. Same address.

Thanks for explanations. Describes a method he follows when short of suitable stops on his camera; encloses an example of his work.

GUTHRIE, Frederick. 1833 - 1886.

133. December 19, 1879.

1-2. Science and Art Department, South Kensington.

Testimonial for post at Josiah Mason's College. Praises SPT's original work, experimental illustrations, general culture, etc.

HALDANE, Richard Burdon. 1st Viscount Haldane of Cloan. 1856 - 1928.

134. January 18, 1904. 3, Whitehall Court, S.W. Thanks for a report; would like to visit the F.T.C., but is only able to give twelve hours' notice of a projected visit.

HARRIS, David Fraser. Born 1867.

555. June 2, 1915.
Dalhousie University,
Halifax, Nova Scotia.

Appreciation of the 'Life of Kelvin'; was formerly assistant in Glasgow University; gives a student's impressions of Kelvin.

HEAVISIDE, Oliver. 1850 - 1925.

135. January 17, 1889. 3, St. Augustine Road, N.W.

522. February 9, 1910.
Homefield, Torquay.
See footnote, 'Life of
Kelvin', vol. 2, p. 1070.

Disagrees with SPT's conclusions about the structure of cores. Postpones the acceptance of an invitation until nearer the date of the function. Congratulations on 'Life of Kelvin'; comments on the allusions to himself; appreciation of Kelvin; his arrangements for buying his house; his 'rumatiks'; advice on boot polishes.

HELE-SHAW, Henry Selby. 1854 - 1941.

480. [June 1916]. 64, Victoria Street. To Mrs. Thompson. Letter of condolence on the death of SPT.

HERBERT, Auberon Edward William Molyneux. 1838 - 1906.

136. February 24 Old House, Ringwood. Thanks for letter. Hopes for a meeting later to discuss educational matters.

HERING, Carl. 1860 - 1926.

138. October 30, 1891. 31816, Spring Garden St., Philadelphia, U.S. Thanks for copy of 'Electromagnet'. Explanations for having missed seeing SPT in Frankfurt.

HERKOMER, Sir Hubert von. 1849 - 1914.

137. 1901. Lululaund, Bushey, Herts. Enquires 'how to make a gutta percha mounted strip comfortably from a piece of pewter' and describes his present unsatisfactory method.

HODGKIN, Thomas. 1831 - 1913.

146. March 31, 1906. Hotel Belvedere, Rome. Supports the nomination of his old friend Sir Joseph Lister 'who ought to be carried into the Senate by acclamation.' Relates anecdote illustrating the international character of Lister's reputation.

147. December 27, 1905.

Barmoor Castle,

Northumberland.

Thanks for Christmas present of treatise on magnetism. Interested in its place of writing at siege of Lucerne in 1269. Quotes Muratori. Will send some writings of his own on Greek archaeology.

148. January 1, 1906. The same.

Will vote for production of SPT's paper on Peregrinus at British Academy, which he thinks very suitable.

149. January 10, 1906.

Describes reprint of Peregrinus 'Rara Magnetica' by Prof. Hellmaun in possession of his cousin W.D. Howard.

150. January 20, 1906. The same.

Thanks for monograph on Gilbert.

151. November 22, 1906. The same.

Regrets that he will not be able to hear Thompson read his paper at the British Academy.

#### HOPKINSON, Edward. 1859 - 1922.

152. July 6, 1895.
Oakleigh, Timperley,
Cheshire.

Will be glad to prepare particulars of their latest forms of motors for locomotives and alternators for Thompson's new edition.

# HUGGINS, Margaret Lindsay. Lady Huggins.

161. May 17, 1898.

1-2. 90, Upper Tulse Hill.

Thanks for Christmas gifts and letter. Deeply grateful for Browning, particularly 'Pauline', and also for copy of SPT's lecture.

162. January 11, 1904.

1-2. The same.

Comments on Peter Peregrinus for which she thanks SPT; thanks him also for a previous gift of 'Monodies', remarks on its ideals, on the 'rush' in present day life, etc.

163. May 24, 1912.

1-5. The same.

Long letter, mainly expressing appreciation of SPT's sympathy with her widowhood, and her own feeling of great loss; offers some apparatus for the Optical Convention, made by Fraunhofer, belonging to the R. S. Asks SPT to write an impression of her husband, Sir William Huggins.

164. May 27, 1912. The same.

Thanks for letter and glad that he will show Fraunhofer apparatus. Pleased that he will write his impressions of her husband.

#### HUGGINS, Sir William. 1824 - 1910.

153. December 22, 1879.

1-2. Upper Tulse Hill.

Letter with attached testimonial for the post of Professor of Physics at Mason's College. Praises SPT's clarity as a lecturer, and his research. 154. June 8, 1881. The same.

'By all means use the testimonial. If you wish any alteration in form I shall be glad to make it....'

155. February 21, 1905. The same.

Thanks for suggesting changes in leaking electroscope from Harvey and Peak, and encloses a note from them. Questions the improvement they claim from new insulating material.

156. February 25, 1905. The same.

Further letter about electroscope and details of its deficiencies. Diagram enclosed.

157. March 16, 1906. The same.

Addressed to 'my dear Piper'. Thanks for book. 'I am wholly under your magnetism'. Asks how he finds time - is one hour of his time equal to the working day of other people?

158. April 11, 1907. The same.

Glad that SPT was elected to Athenaeum; as P.R.S. put his name forward to Lord Rayleigh.

159. April 22, 1907. The same.

Thanks for British Academy paper. Lost in admiration of scope of SPT's powers.

160. December 19, 1907. The same.

Returns gems in which radiation has not caused as much change as expected. Refers to Kelvin's death and his last visit.

HUGHES, David Edward. 1831 - 1900.

165. January 15, 1884. 108, Great Portland Street. See 'Life',p. 101. Thanks for formula for graduations of magnetic balance; difficulties involved in making distance a constant; hoping to demonstrate the existence of molecules.

166. January 21, 1884. The same.

Further discussion of the use of the magnetic balance; completing researches on Magnetism, to be written up for the R.S.; comment on sketch of Helmholtz; 'when I get hold of my molecule by the tail, I will send him to you for a sketch'; suggests sending formulae to the 'Electrician'. 167. January 24, 1884. The same.

Will sponsor SPT's note on the theory of the magnetic balance for the Proc.R.S.; comments on its use; leaves this field of research to SPT; etc.

168. January 31, 1884. The same.

Gives measurements of balance, made by Jones; no difficulties in adapting balance to help SPT's calculations.

169. February 7,1884. The same.

Has taken SPT's paper to the Secretary of the R.S.

170. February 7, 1894. 40, Langham Street. Invitation to 'Our Club'; its foundation by Dickens, etc; Wimshurst's election to the R.S.; etc.

171. [November, 1912.] 41, Dana Street, Cambridge, Mass. From Mrs. Hughes. Regrets that Professor Hughes papers, about which SPT had enquired, are in London.

See also LARMOR, Sir Joseph. 189.

HUTCHINSON, John.

544. March 29, 1910.1-2. 199, Renfrew Street, Glasgow. Appreciation of Kelvin 'Life'; anecdote about the 'Glasgow pamphlet'; explanation of the difficulties of Thomson's assistant MacFarlane, with mathematics classes, then compulsory for all Arts students, qualified to attend or otherwise.

HUXLEY, Thomas Henry. 1825 - 1896.

172. December 21, 1879. 4, Marlborough Place. Cannot give SPT a testimonial as he does not go outside his ownfield.

INWARDS, Richard. 1840 - 1937.

173. October 23, 1915. 6, Croftdown Road, London, N.W. Has all Perigal's published pamphlets and could probably identify an unnamed instrument if he saw it; will send specimen of magnetite if it would be of interest; refers to his experience of the occurrence of natural magnetic samples. JACK, William. 1834 - 1924.

532. February 25, 1910. 5, St. John's Terrace, Hillhead, Glasgow. To Macmillan and Co. Thanks for copy of the 'Life of Kelvin'.

JAMES, Henry. 1st Baron James of Hereford. 1828 - 1917.

573. October 27, 1884. Inner Temple.

Joint opinion, with Sir William Bousfield, on SPT's 'Valve' telephone which they did not hold to be an infringement of the Bell and Edison patents.

JEBB, Caroline. Lady Jebb, wife of Sir Richard Jebb. 1840 - 1930.

621. Springfield, Newnham, Cambridge. To Lady Thomson. Admiration of Mr. Balfour's speech at the presentation of his portrait to Sir William: her busy social life in Cambridge: Mrs. Creighton's dislike of Peterborough, and the contrast between being the wife of a professor and a bishop 'a wholesome recollection of Mrs. Proudie pervades their profession.'

KAPP, Gisbert. 1852 - 1922.

576. May 28, 1892. Wimbledon.

Typewritten, including signature. Arrangements for marking examination papers.

577. September 23, 1895. 3, Lindenallee, Berlin. Thanks for book on multiphase motors. Thinks it will not be possible to publish Dobrwalsky's work. Describes opposition of physical laboratories to electrical railways because of disturbance; gives advice on giving a lecture to German technical societies.

KELVIN, Lord. See THOMSON, Sir William, 1st Lord Kelvin.

KELVIN, Frances. Lady.

485. December 27, 1909. Netherhall.

Thanks for letter.

486. February 8, 1910. The same.

Thanks for book ['Life of Kelvin'?].

487. February 18, 1910. The same.

Admiration of biography; dislike of photograph by Agnes King; Kelvin's episcopalian views and Sir Edward Fry's mistaken views on subject.

488. January 1, 1911. The same.

Thanks for greetings.

489. May 4, 1912. London.

Asks SPT to speak for her at unveiling of bust of Lord Kelvin at I.E.E.

490. May 13. (No year but this and following letters seem to be in sequence).

Arrangement for SPT to call.

491. May 15.

Asks SPT to see that her relations are found seats at ceremony.

492. June 6.

Dr. Bottomley will call at the Institution to see two places suggested [for bust of Lord Kelvin to be placed?].

# KEMP, C.I.P.

578. January 29, [1904].

1-4. Mersey Railway, Resident Engineer's Office. Typewritten. Sends model which illustrates rotary magnetic fields in three phase motors; asks for opinion about it; information about tank for testing H.T.3 phase alternators of large (K.W.) capacity, and use of induction motors as generators, at Stuart Street Station.

579. February 6, 1904.

1-3. The same.

Typewritten. Discussion of his model and its possible use and publication, in form suitable for students and practising engineers.

KEMPE, Sir Alfred Bray. 1849 - 1922.

466. June 15, 1916. 22, Pembridge Square, W. To Mrs. Thompson. Letter of sympathy on the death of SPT.

KENNEDY, Sir Alexander Blackie William. 1847 - 1928.

174. January 5, 1907.
Caledonian United
Service Club,
Edinburgh.

Describes the difficulties of keeping staff going owing to shortage of work and the limited number of vacancies available.

KENNELLY, Arthur Edwin. 1861 - 1939.

467. July 22, 1916. Islesford, Maine.

To Mrs. Thompson. Letter of sympathy on the death of SPT; admiration of his work in many fields.

KENYON, Sir Frederick George. 1863 - 1952.

580. June 22, 1912. British Museum. Postcard. Thanks for note.

KING, Agnes Gardner.

499. February 8, 1910. Hartwell, Wroxham, Norfolk. Thanks for copy of 'Life of Lord Kelvin'; illness of her sister.

KING, George.

500. March 9, 1910. 1, Cardigan Gate, Richmond Hill, Surrey. Congratulations on 'Life of Lord Kelvin'.

KIRNER, Joseph.

581. September 15, 1909.1-2. Tiergartenweg 1,

Stuttgart.

matical problem of fields of alternating currents in electrical engineering with examples from Ernst's 'Die Hebezeuge', vol. 2,

In German. Discusses a mathe-

diagrams.

KNAPP, Wilhelm.

175. January 27, 1897. Mühlweg 19, Halle. In German. Answer to an enquiry about three volume work by Nernst and Borker, which will not be ready until the end of the year; gives SPT first option for its translation. Pleased he is pre-

paring a new edition of Polyphase electric currents: will settle their accounts after the book fair in May.

177. February 2, 1897. The same.

In German. Professor Lummer is prepared to consider translating 'Light visible and invisible'; would like to know size of book, so asks him to send proofs as soon as possible.

178. February 11, 1897. The same.

In German. Is still negotiating with Lummer about the translation: if he refuses will approach a translater recommended by Nernst: asks for proofs.

# KOENIG, Karl Rudolph. 1832 - 1901.

179. January 29, 1889. 27, Quai d'Anjou, Paris. In French. He finds he owes SPT 5 francs but hopes he can settle this small account at a later meeting.

180. March 13, 1889. The same.

In French. Thanks for sending details of 'sifflets' of Lord Rayleigh; which he will try out as soon as possible.

181. December 4, 1898. Paris.

In French. Thanks for 'Life of Faraday'. Describes decline of health since their last meeting; still carries out experiments, has not published any results, however, etc.

# KÖNIGSBERGER, Leo.

530. February 11, 1910. Heidelberg.

In German. Thanks for copy of the 'Life of Kelvin'.

LANE, John. 1854 - 1925.

469. June 15, 1916. 8, Lancaster Gate Terrace, W. To Mrs. Thompson. Letter of condolence.

## LANKESTER, Sir Edwin Ray. 1847 - 1929.

182. June 14. 29, Thurloe Place.

Numerous enquiries about lightning, and personal safety in varying circumstances.

183. November 14.

1-2. The same.

Enquiries about length of sound waves and time rate of light waves; method of determination of wave length of light and determination of limit of microscopic vision.

## LARMOR, Sir Joseph. 1857 - 1942.

184. June 14, 1902. Athenaeum.

Unable to accept invitation.

185. December 19, 1906. St. John's College, Cambridge. Insertion of further letters in his edition of Stokes.

186. June 14, 1907. Royal Society.

Expresses the regret of the Council at SPT's absence from a meeting.

187. April 25, 1908. St. John's College, Cambridge. Unable to accept invitation.

188. January 24, 1908. Royal Society.

Asks SPT to make a further report on a paper for the Physics Committee of the Society.

189. April 5, 1910. St. John's College, Cambridge. Letter dealing with technical points in SPT's R.S. paper 'Physiological effects of an alternating magnetic field'.

190. November 15, 1910. The same.

Discusses how sound effect is obtained when horn is blown, sound waves etc.

191. July 16, 1913. The same.

Denies responsibility for loss of some paper [?].

524. February 12, 1912. The same.

Thanks and congratulations for 'Life of Kelvin'.

470. June 14, 1916. The same.

To Mrs. Thompson. Letter of condolence.

# LARSEN, Absalom.

192. July 18, 1912.

1-3. Copenhagen.

Probably in answer to an enquiry; discusses, and quotes extensively (in German) from H.C. Oersted's 'Ansicht der chemischen Naturgesetze', 1812, with reference to his theory of light.

LEE, Sir Sidney. 1859 - 1926.

193. October 7, 1912.
Dictionary of National
Biography,
15, Waterloo Place.

Will shortly be sending proof of article on Lord Kelvin. Details of article.

550. March 9, 1910. The same.

Postcard about SPT's article on Kelvin for the D.N.B.

471. June 15, 1916. 108a, Lexham Gardens, W. Postcard to Mrs. Thompson. Condolences on death of SPT.

LENARD, Philipp. 1862 - 1947.

194. January 8, 1908. Heidelberg.

In German. New year greetings and good wishes. Invitation to visit Heidelberg.

195. Heidelberg. In German. Unable to accept invitation to Optical Convention.

LINDT, W.

582. January 8, 1908. Dreysestrasse 3, Berlin.

In German. Asks for permission to translate 'Light, visible and invisible'.

LIPPMANN, Gabriel. 1845 - 1921.

196. July 7, 1912. 10, Rue de l'Eperon. Paris. In French. Letter from Mrs. Thompson to Mme. Lippmann has been lost in post; regrets he cannot accept invitation when he visits London.

LISTER, Joseph. 1st Baron Lister of Lyme Regis. 1827 - 1912.

197. June 8, 1897. 12, Park Crescent, Portland Place. Thanks for congratulations [ on peerage ].

198. December 17, 1903.
Palace Villas,
Devonshire Road,
Buxton.

Thanks for note on Dr. Gilbert.

LIVEING, George Downing. 1827 - 1924.

221. July 14, 1909.
Lancrigg,
Grasmere.
Quoted, 'Life of
Kelvin', Vol. 1, p. 442.

Describes Kelvin's style as a lecturer; his tendency to digress from the subject in hand, etc.

See also HUTCHINSON, John, 544, for a comment on this.

LOCKYER, Sir Joseph Norman. 1836 - 1920.

199. September 15, 1904. Sidmouth.

Will be pleased to join SPT 'if Mayor invites me' [to Colchester Oyster feast ?].

LODGE, Sir Oliver Joseph. 1851 - 1940.

200. June 29, 1897.2, Grove Park,Liverpool.

Thanks for article in the 'Saturday'; is glad to see SPT with his other friends agreeing with his views. Encloses unpublished paper.

201. July 1, 1897. The same.

Note about experiment with mirror.

202. January 2, 1901.
Mariemount,
Birmingham.

New year greetings, note about article of SPT's in Phil. Mag.

203. February 22, 1903. The same.

Describes his method of electrifying the air.

204. September 26, 1904. Birmingham University.

Dictated. Acknowledges letter.

205. November 17, 1904. The same.

Dictated. Remarks on Kapp's visit and health. Describes experiment he has been making, and asks Thompson to advise whether it is more suitable for the Royal Society or the Inst. Elec. Eng. - a 'method of maintaining a continuous current of very high potential.. at something the order of a million volts'.

206. November 21, 1904. The same.

Will take up SPT's suggestion to name current; will send note to R.S. which he is sending first for SPT to see. 207. May 3, 1905.

Dictated. Enquiry about experimental alternator.

208. November 15, 1919. Edgbaston.

To Mrs. Thompson. Thanks for proof. Had completely forgotten having written letter.

514. February 9, 1910. The same.

Thanks, congratulations on the 'Life of Kelvin.'

472. June 14, 1916. The same.

To Mrs. Thompson. Letter of condolence.

# LONDON. Institution of Electrical Engineers.

463. June 22, 1916. Victoria Embankment. Typewritten. From the Secretary, P.F. Rowell, to Mrs. Thompson. Sends copy of telegram of sympathy from Associazione Elettrotecnica Italiana.

# LONDON. Hampstead Scientific Society.

465. June 14, 1916. 32, Willoughby Road, Hampstead. From the Secretary, C. Bartrum, to Mrs. Thompson. Letter of sympathy on the death of SPT.

## LORENTZ, Hendrik Antoon. 1853 - 1928.

209. October 15, 1913. Haarlem.

Postcard. Thanks for translation of Huygens' Treatise on Light.

## LOVE, Augustus Edward. 1863 - 1940.

508. February 8, 1910. 34, St. Margaret's Road, Oxford. Thanks for copy of the 'Life of Kelvin.'

# LUBBOCK, Sir John. 1st Baron Avebury. 1834 - 1913.

210. February 6, 1895. 2, St. James' Square Thanks for 'Elementary lessons in electricity.'

211. p.m. January 19, 1906. High Elms Farnborough. Postcard. Note about a nomination [?] form.

LUMMER, Otto. 1860 - 1925.

212. December 27, 1893. Leibnitzstrasse 72, Charlottenburg. In German. New Year greetings.

213. December 26, 1897. Charlottenburg.

New Year greetings. Delay of the printing of his translation of SPT's book.

214. December 28, 1898. The same.

In German. Thanks for Christmas greetings, and the dedication in SPT's latest book; hopes he will soon receive copy of the translation of 'Light visible and invisible'.

215. November 1, 1911. The same.

Gratitude for SPT's edition of his, Lummer's, articles; regrets that they have not been able to meet in Paris, etc. In German.

216. January 1, 1902. Friedrich-Karlplatz 14, Charlottenburg.

In German. Thanks for Christmas greetings; best wishes for future.

MCDOWELL, J.H.M.

473. June 17, 1916.

1-2. 9, Linden Road Garden City, Newport, Mon. To Mrs. Thompson. Letter of sympathy on the death of SPT; recollections of him.

MACH, Ernst. 1838 - 1916.

217. March 1, 1879. Prague.

In German. Observations on binaural audition, with a list of references to articles in periodicals, and comments on the validity of the opinions expressed.

218. March 22, 1880. Obstmarkt 7, Prague. In German. Sends copy of an article on Binaural audition and would be grateful if SPT would send any of his articles on the subject in return.

MADAN, Falconer. 1851 - 1935.

219. June 7, 1914.94, Banbury Road,Oxford.

Thanks for the catalogue of SPT's library which he will put in the Bodleian.

MARCONI, Guglielmo. 1874 - 1937,

445. January 28, 1916. Rome.

Typewritten to W. Duddell. Letter of introduction for Professor Guglielmo Mengarini, designer of the electric power transmission scheme from Tivoli to Rome in 1892.

MARGOLIOUTH, David Samuel. 1858 - 1940.

220. September 28, 1914. Oxford.

Typewritten. No light to be thrown on word 'calamita', from Islamic languages.

MARTIN, Thomas Commerford. 1856 - 1924.

583. May 17, 1906. Electrical World, 114, Liberty Street, New York. Typewritten. Discussion of the possible theft of the copyright of one of SPT's books.

559. May 12, 1910.
National Electric
Light Association,
29, West 39th Street,
New York.

Typewritten. Sends a copy of his review for the 'New York Tribune', of the 'Life of Kelvin'.

MASCART, Eleuthère Elie Nicholas. 1837 - 1908.

584. October 28, 1900.

Bureau Central

Météorologique,

176, Rue de l'Université.

In French. Admiration of SPT's versatility; thanks for gift of 'Photographic optics' which will be valuable to scientific students of photography.

MATTHEY, George. 1825 - 1913.

222. July 25, 1899. Hatton Gardens. Hopes SPT will accept one of his firm's screens [?].

MELDOLA, Raphael. 1849 - 1915.

223. October 17, 1913.6, Brunswick Square,London.

Deplores the lack of an organic chemist on the council[of the R.S.]; states views on modern 'mathe-matical physicist'; lists the representatives at a Chemistry Congress [held that day at the Institute of Chemistry].

513. February 8,1910. The same.

Thanks for copy of the 'Life of Kelvin.'

MENDENHALL, Thomas Corwin. 1841 - 1924.

224. November 7,1893. U.S. Coast and Geodetic Survey, Washington. Thanks for an 'Odde Volume'; would like another photograph of SPT.

MENGARINI, Guglielmo. 1856 - 1927.

474. August 20, 1916. Rome.

Typewritten. To Mrs. Thompson. Letter of condolence.

See also MARCONI, Guglielmo. 445.

MERZ, John Theodore. 1840 - 1922.

225. February 1, 1909. The Quarries, Newcastle. Thanks for copies of SPT's works; enjoyment of his visit.

523. February 10, 1910. The same. Dictated. Thanks for copy of the Kelvin 'Life'.

METCALF, Henry B.

226. September 8, 1883.
Pawtucket, R.I.

Thanks for 'Life of Philipp Reis'; will try to promote its sale in the U.S.

MEYNELL, Wilfrid. 1852 - 1948.

227. n.d. 2a, Granville Place, Portman Square. Has not found a missing book;hopes to meet the Thompsons in Rome, where Mrs. Meynell has just arrived.

MILLAR, W. J.

560. May 13, 1910. Rothesay. Details of his student days under Rankine and James Thomson; anecdotes of Lord Kelvin.

MILLER, Dayton Clarence. 1866 - 1941.

477. Case School of Applied Science, Cleveland, Ohio.

To Mrs. Thompson. Letter of sympathy on the death of SPT.

MINCHIN, George M. d. 1914.

533. February 19, 1910. 149, Banbury Road, Oxford. Lists some misprints in the 'Life of Kelvin'; suggests that Carnot's views could be explained morefully.

MOND, Ludwig. 1839 - 1900.

228. December 4, 1906. 20, Avenue Road, Regent's Park. Typewritten. Reminder that SPT was to call upon him the next day.

229. December 7, 1906. The same.

Regrets that SPT has been called away from town; is anxious to see him as soon as possible.

MOSCHELES, Felix. 1833 - 1917.

476. June 28, [1916]. The Grelix, 80, Elm Park Road. To Mrs. Thompson. Letter of condolence on death of SPT. Written by Margaret Moscheles.

MOULTON, John Fletcher. 1st Baron Moulton. 1844 - 1921.

230. January 11, 1890. 57, Onslow Square. Thanks for loan of Wimshurst machine; has no longer much leisure time for experiments.

MURRAY, Sir James Augustus Henry. 1837 - 1915.

233. January 8, 1904. Oxford.

Reply written on verso of an enquiry by SPT dated January 7, asking whether there is word for mineral 'vincentina'. Reply in negative. Both printed in 'Life', pp. 242-3.

235. June 1, 1905. Oxford.

Asks for explanation of word 'phonophore'.

234. [1906] Oxford. Thanks for copy of 'Peregrinus'; praise of British Academy paper.

236. May 6, 1906. Oxford.

Asks for definition of 'phasing'.

237. December 12, 1906. Oxford. Asks for proofs. Asks for explanation of 'polyphase'; source, first use, etc.

238. December 17, 1907. Sends some information about an Oxford. unspecified word; difficulties of tracing use, etc. 239. March 16, 1908. Thanks for papers on 'temperature'; asks about origin of the name 'primium nobile'. 240. March 4, 1909. Asks for explanation of 'puppet valve' Oxford. and early instance of use. June 3, 1910. Asks for explanation of word 'teaser'. 241. Oxford. November 25, 1911. Discusses use and source of word 242.Oxford. 'telegrapher'. Asks for definition and use of word 243. January 29, 1913. Oxford. 'torsion'.

NEWCOMB, Simon. 1835 - 1909.

244. April 8, 1907. Typewritten. Thanks for election
Washington, D.C. as Hon. Fellow of Physical Society
U.S.A. of London (written to SPT as Secretary of the Society).

NEWMAN, Sir George. 1870 - 1948.

526. February 12, 1910. Congratulations on 'Life of Kelvin'. Hatch End, Middlesex.

478. June 13, 1916. To Mrs. Thompson. Letter of condo-Grims Wood, lence on death of SPT. Harrow Weald.

NIPHER, Francis Eugene. 1847 - 1927.

245. November 11, 1895. Thanks for book; sends book of his own which he hopes SPT will review, and copy of his photograph; would like SPT's in return.

246. July 14, 1908. Sends account of recent research

1-2. Washington University, with Holtz machine with page of diagrams.

OSTLER, William E.

586. April 19, 1902. 8, Oxford Terrace, Islington. An enquiry about the possibilities of a 'Frequency transformer' which as yet he has only visualised.

PARSONS, Sir Charles Algernon. 1854 - 1931.

247. November 8, 1906. Holeyn Hall, Wylam on Tyne. Thanks SPT for his letter about Campbell Swinton, will do what he can to further his chances.

248. February 11, 1907. The same.

Thanks for loan of lecture on 'Manufacture of light'.

PEDLER, Sir Alexander. 1849 - 1918.

249. February 4, 1908.
British Science Guild,
Queen's Gate.

Enquires where a portrait of Gilbert might be found, as Sir Norman Lockyer has suggested that one might be shown at the F.B. Exhibition.

PERCIVAL, John. 1834 - 1918.

587. January 27, 1916. The Palace, Hereford. Glad that SPT has approved his views on 'war fever' [as expressed in a letter to the 'Times' on January 21, ''The clergy and war fever'' - a cutting of it is enclosed in this letter].

PERCY, Henry George. 7th Duke of Northumberland. 1846 - 1918.

250. January 3, 1913. Alnwick Castle.

Typewritten. Refers to case of electricity, used as remedy for loss of speech, in 1752; which Crookes has said may interest SPT. Would like to know how the electricity could have been applied.

PERRY, John. 1850 - 1920.

543. March 23, 1910.1-4. Imperial College.

Congratulations on 'Life of Kelvin'; detailed comments on Kelland's misapprehension of Fourier's theorem: appreciation of SPT's treatment of the history of thermodynamics.

PETSIK, Leopold.

269. June 14, 1892. Trieste.

Is about to publish account of the English and American works on Reis and asks permission to reproduce certain figures from SPT's 'Life'.

PINTO,

479. June 16, 1916.
Hazelmere,
12, Ellington Road,
Ramsgate.

To Mrs. Thompson. Letter of sympathy on the death of SPT.

PLANTÉ, Gaston. 1834 - 1889.

588. December [?]8,1881. Paris.

In French. Appreciation of 'Electricity and Magnetism'; suggests a French translation; and possible publishers, etc: sends a photograph of his battery to be used for the next edition of Electricity and Magnetism.

PLAYFAIR, Lyon. 1st Baron Playfair. 1818 - 1898.

251. December 15, 1895.68, Onslow Gardens.

Will be unable to attend meeting in College of Physicians.

POGGI, Cencio.

252, May 5, 1909. Lugano. In Italian. Thanks for news about Marcoldi. Information about a manuscript of which several copies exist, he understands; recommends its sale for 75 fr.

POULTON, Sir Edward Bagnall. 1856 - 1943.

253. April 5, 1913. St. Helen's, I.O.W. Dictated. Has no further information about Scholar Gipsy; Arnold may be referring to Carlyle. Is going to ask Mrs. Humphry Ward about this. PRAIN, Sir David. 1857 - 1944.

254. January 19, 1912. Kew.

Thanks for letter offering Mr. Tatham's herbarium to the Gardens. See Life, p. 4. John Tatham was SPT's grandfather.

PREECE, Sir William Henry. 1834 - 1913.

255. December 2, 1879. General Post Office.

Asks for details of any striking experiments, suitable for R.S.A. lectures for children on Light and Sound.

256. December 6, 1879.
Gothic Lodge,
Wimbledon.
Quoted 'Life', p. 41.

Praises SPT's 'idear'. Will carry out balloon plan. Asks for details of experiment with balls and their means of suspension. Possible arrangement illustrated in a diagram.

257. January 22,1880.1-2. General Post Office.

Sends pencil drawing showing how he made hat speak [for lectures mentioned in 255 ?].

258. June 5, 1912. Penrhos, Carnaryon.

Says that Lady K. [Kelvin?] need not write to Ferranti. Refers to his ill health.

RACKHAM, Arthur. 1867 - 1939.

November 19, 1905.3, Primrose Hill Studios,Fitzroy Road.

Thanks for sending copy of the 'Pied Piper'; mentions intention of painting subject some day, 'which I am afraid will not be for a long time yet'; discusses problem of costume, etc.

Note. Rackham illustrated the story in 1934.

RAMSAY, Sir William. 1852 - 1916.

260. December 13, 1895.
University College,
London,

Regrets not having answered enquiry about cerium; doubts its possibility of having magnetic properties; will try and make some. Has heard from A.J. Balfour that he hopes to put forward a Bill [on University of London?] 'on lines we want'.

261. July 12, 1906. The same.

Hopes that his son, who is concentrating on chemistry, will be able to go to SPT's lectures. Discusses his abilities, and ways of arranging the affair.

262. December 9, 1907. The same.

Regrets that SPT has decided not to stand for Senate.

263. July 3, 1910. 19, Chester Terrace, Regent's Park. As Chairman of the 'Energy' Committee of the British Science Guilds, asks SPT to write memorandum on the possibility of gaining energy 'making use of difference of atmospheric potential as an available and profitable source of energy'.

RAYLEIGH, 3rd Baron. See STRUTT, John William, 3rd Baron Rayleigh.

REIS, Carl. (Son of Philipp Reis).

264. December 30, 1883. Frankfurt.

Thanks for book on telephone. Lists reviews of it in German papers, refers to celebration of his father's birthday.

265. September 23, 1885. Friedrichsdorf.

Thanks for letters and shares in New Telephone Co. His father's monument will soon be finished and he hopes SPT will come to festival; hopes to visit England to improve English when he completes his military service.

266. September 28, 1885. Friedrichsdorf.

Has been present at unveiling of monument. Asks if SPT can help to get him a place in England.

RIGHI, Augusto. 1850 - 1920.

271. [1902 ?].
Istituto di Fisica,
Università di Bologna.

In French. Discussion of his possible nomination as candidate for a Nobel prize; he himself proposed Lorentz; influence of the international representatives in Sweden.

272. [1902 ?].
The same.
See Révue générale des
Sciences, 1901, p.994.

In French. To Oliver Lodge. States that Henri Poincaré was the supporter of the views of Cremieu.

273. Annotated, 'Received June 24, 1902'.
The same.

In Italian. He is returning a portrait which he has had copied. Suggests that SPT publishes a letter which would help to disprove legends [he is probably referring to the dispute about the Marconi patents: see Life, p.81-4]. Invitation to the meeting of the Italian Physical Society at Brescia, in September.

274. [ 1902 ]. The same.

Postcard. In French. Expresses pleasure that SPT will give paper in person at the Brescia congress. Would like to see the 'Saturday Review' letter [ on Marconi ].

275. [ 1902 ]. Vergato per Moulese. In French. Regrets that SPT cannot attend Brescia meeting; hopes that he will send his written paper. Asks if SPT can send him copies of the correspondence about Marconi.

276. [1907].

Postcard. In Italian. Thanks for election as a Foreign Member of the Royal Society.

277. [1913].

In French. Enquiry about the editor of the 'Philosophical Magazine' in which he would like to have an article published; is unable to accept Lodge's invitation to Birmingham [ to attend B.A. Meeting ?].

278. [1914 - 16 c].

In Italian. Reaffirms his opinions about Anglo-Italian friendship which he had stated at a soirée of the Royal Society; the intolerable position of his country had led to the need to go to war.

279. June 6, 1916. Istituto di Fisica. In French. Thanks for report of the British Science Guild; the importance of government support of science; life in Italy untroubled by the war; reliance on friendship with England; his son, now a soldier, wishes to be remembered to SPT.

280. [1916].

Mourning postcard. In Italian.

Acknowledgement of letter of sympathy.

ROBERTS - AUSTEN, Sir William Chandler. 1843 - 1902.

281. December 16, 1896. The Royal Mint.

Thanks for a specimen of brass, will try and take its 'cooling-curve' with his recording pyrometer.

ROMANES, C.H.

282. November 15, 1882. Worthing.

Thanks for latest edition of 'Electricity and magnetism'.

ROSCOE, Sir Henry Enfield. 1833 - 1915.

516. February 19, 1910. 10, Bramham Gardens, S.W. Congratulations on 'Life of Kelvin'.

ROSS, Sir Ronald. 1857 - 1932.

283. December 3, 1912.
Berners Hotel,
London.

Will be coming to London and be available for Committees [of Royal Society?]. Agrees that Tropical Committee needs revivifying.

RUCKER, Sir Arthur William. 1848 - 1915.

284. June 30, 1882. Claremont, Leeds.

Thanks for copy of 'Electricity and Magnetism'. Recommends his assistant Starling, who was applying for post with SPT, as an examiner.

RUTHERFORD, Ernest. 1st Baron Rutherford of Nelson.

457. July 30, 1907. Manchester University. Unable to attend committee meeting of the Franco-British Exhibition; hopes SPT will be his representative; has list of suggestions for exhibits; considers 'Radioactive substances' should be included.

285. January 6, 1914. 17, Wilmslow Road, Withington. Thanks for congratulations [ on knighthood ] 'while it is very pleasant to have one's work recognised, the form is rather embarrassing for a relatively youthful and impecunious professor like myself'.

SACK, Hilmar.

270. January 11, 1884. Kaiserstrasse 13, Wurzburg. In German. Asks if he may translate 'Life of Philipp Reis'.

SAUNDERS, Thomas Bailey. 1860 - 1928.

287. March 12, 1907. Eastbourne.

Thanks for material sent to him; will keep Sotheby's catalogue if possible as he will refer to it in his preface to the 'Life and letters of P.M. [elancthon]. Discusses the judgements of the compiler of this catalogue on Melancthon's M.S.

288. May 24, 1907. Eastbourne.

Thanks for SPT's letter from Paris describing London University visit there [see Life, pp. 181-2, for extracts from Thompson's letter]. Thinks that article should be written on the 'failure of the University of London'. Refers to newly founded Imperial College which it 'will rapidly eclipse in popular imagination and eventually become a separate University for Science'.

530. February 13, 1910. The same.

Thanks for copy of 'Life of Kelvin'.

547. p.m. February 14,1910.

Postcard, in German. Address given as 'Wittenberg, 1546' signed 'dein Ph. M'; states that he is no prophet and cannot be expected to be familiar with contemporary Oxford writings; greetings from Luther.

289. May 6, 1910. p.m. Eastbourne. Postcard. In Latin. Thanks for reference to Melancthon.

290. June 11, 1910.
Fern Lodge,
Milnthorpe Road,
Eastbourne.

Thanks for portraits of Melancthon and SPT. Would like to know the provenance of Melancthon prints.

SCHUSTER, Sir Arthur. 1851 - 1934.

481. June 26, 1916. Yeldall, Twyford, Berks. To Mrs. Thompson. Letter of condolence on the death of SPT.

SHAW, Sir William Napier. 1854 - 1945.

231. March 10, 1908. 10, Moreton Gardens, S.W. Invitation to meet Hellmann, the Director of Prussian Meteorological Institute.

232. June 8, 1915. The same.

Thanks for congratulations [ on knighthood ].

SIDGWICK, Mrs. Eleanor Mildred. 1845 - 1936.

268. May 11, 1903. Newnham College, Cambridge. Typewritten. SPT's daughter [Helen] is registered at the College for the next session.

SIEMENS, Alexander. 1847 - 1928.

291. May 15, 1896.12, Queen Anne's Gate.

Thanks for tickets [for lecture by SPT?].

SIEMENS, Sir William. 1823 - 1883.

292. July 26, 1883. 12, Queen Anne's Gate. Thanks for copy of Life of Phillip Reis.

SMIRNOFF, Alexander.

293. January 30/February 11, 1892. Fontanka 145, . St. Petersburg.

In German. States the need to translate the 'Electromagnet' into Russian, and the importance of spreading knowledge of this important book.

294. March 24/April 5, 1892. St. Petersburg. In French. Dictated. Sends first proof of Russian translation of the 'Electromagnet'.

SNELL, B.H.

295. August 29, 1888. Putney.

Astonished at the amount of work done by SPT. Admiration for 3rd edition of Dynamo electric machinery.

Refers to article in B.A. report, 1864, on induction apparatus by a J.B. Thompson.

SNELL, Sir John Francis Cleverton. 1869 - 1938.

589. July 9, 1915. 8, Queen Anne's Gate. Thompson is entitled to his own views on the Volunteer Training Corps; statement of his opinion of militarism and the importance of defending the 'Fatherland'.

STOKES, Sir George Gabriel. 1819 - 1903.

296. February 29, 1896.
Lensfield Cottage,
Cambridge.
See 'Life', p. 185-6.

Typewritten. SPT has made interesting discovery which he should publish soon. Believes that Röntgen rays are transversal vibrations of excessive frequency. Discusses calorescence.

297. March 2, 1896.
The same.
Partly quoted, 'Life'
p. 186.

Typewritten. SPT has been anticipated by Becquerel; gives reference.

298. May 28, 1896.
The same.
Partly quoted, 'Life'
p. 191.

Describes a recent experiment with uranine and also one carried out 4 years before.

STONEY, George Johnstone. 1826 - 1911.

299. December 10, 1907. 30, Chepstow Crescent, London. Asks SPT to sign a certificate in application for Fellowship of the Royal Society for Gerald Stoney; matter is urgent.

300. December 13, 1907. The same.

Thanks for SPT's acceptance.

301. Undated. The same.

Expresses anxiety at not hearing from SPT. Had posted certificate 3 days ago.

302. December 17, 1907. The same.

Thanks for receipt of certificate.

303. June 18, 1910. The same.

Asks SPT's permission to write note of introduction for W.J. Greenstreet at H.D. Ellis'request. Expresses admiration for 'Life' of Lord Kelvin.

STRECKER, Karl George Christian Bernhard. 1858 - 1934.

590. May 11, 1902. Berlin. Postcard. In German. Enquires if he may have further chapters of 'Polyphase electric currents' for translation.

304. December 14, 1905.

1-2. Berlin.

In German. The first volume of 'Dynamo electric machinery' is not yet printed; account of his summer holiday travels in the Tyrol.

STROH, John Mattihias Augustus. 1828 - 1914.

305. May 22, 1890. 98, Haverstock Hill, N.W. Glad to hear subject of SPT's Friday evening lecture at the Royal Institution; will lend him any apparatus he requires.

STRUTT, John William. 3rd Baron Rayleigh. 1842 - 1919.

306. January 20, 1878.
Terling Place,
Witham, Essex.

Will give SPT a piece of photographic apparatus.

307. March 1, 1879.4, Carlton Gardens, S.W.

Grants permission to quote any of his writings on Binaural audition.

308. December 19, 1879. Terling Place.

States that SPT would make good use of further opportunities for scientific work in the post for which he is applying.

309. October 31, 1900. The same.

Thanks for copy of translation of Lummer's 'Optics'. In pencil.

310. February 3, 1902. 10, Downing Street. Having a piece of apparatus made described in 'Polyphase Electric Currents'; requires further information. In pencil.

311. October 30, 1908. The same.

Is sending Kelvin's letters to SPT.

October 31, 1909. 312. The same.

Discusses possible candidates for the Nobel prize. Favours Schuster and Dewar for Physics and Chemistry.

February 8, 1910. 511. The same.

Thanks for copy of 'Life of Kelvin'.

May 21, 1912. 313. The same.

Answer to an enquiry. In pencil.

Undated. 314. The same. Very brief note; has made notes in some book.

SWAN, Sir Joseph Wilson. 1828 - 1914.

November 30, 1881. 315.New Carlton Club.

Sends one of his miner's lamps and gives details of its mechanism.

316. December 8, 1881. Underhill, Gateshead on Tyne.

Thanks for 'Electricity and Magnetism' on which he comments.

September 14, n.d. 317. Overhill, Warlingham, Surrey.

'Written by H.S.' Comments on life of Kelvin. Invitation to visit his home.

Postcard photograph of Swan, dated Christmas 1910.

TAIT, M.A.

**31**8.

504. February 9, 1910. 30, George Square, Edinburgh.

Thanks for copy of 'Life of Kelvin'; illness of Mrs. Crum-Brown.

TAYLOR, Sedley. 1835 - 1920.

February 18, 1879. 319. Trinity College, Cambridge.

Sends copy of Lord Rayleigh's paper [dealing with binaural audition]; says that Politzer's paper on the ear does not deal with this. See 'Life', p. 108.

THOMPSON, Silvanus Phillips. 1851 - 1916.

August 29, 1885. 594. 20. Arundel Gardens. Letter to 'Smith'; detailed drawings etc. and description of experiment with magnets: Bosanquet's theory of magnetism previously worked out by Lamont: gives formula.

356- Correspondence between J.D. Hamilton Dickson and

377. Thompson, from June 1908 to August 1909, about details in the 'Life of Kelvin'.

See also AYRTON, William. 3.
THOMSON, William. Lord Kelvin 326, 342, 353.
WILKS, Sir Samuel, 397.

#### THOMSON, Elihu. 1853 - 1937,

320. December 29, 1893.
Swampscott, Mass.,
U.S.A.

Thanks for invitation to join SPT next summer; expresses pleasure in his recent visit; is looking out a lecture about which SPT enquired.

321. June 11, 1894. The same.

Long letter, with cover, which is endorsed 'on silicide of carbon and on alterno-current motors,' which are described in detail. Refers to ill health and inability to make trip to Europe.

322. January 1, 1898. The same.

Thanks for copy of life of Faraday. Season's greetings.

323. July 27, 1914. The same.

Thanks for copy of 'Rose of the Winds'; alludes to possibility of SPT visiting the States the next year.

482. June 26, 1916. The same.

To Mrs. Thompson. Letter of condolence on the death of SPT.

# THOMSON, James.

493. February 8, 1910.1-2. 22, Wentworth Place, Newcastle. Thanks for a copy of the 'Life of Kelvin'.

502. February 20, 1910. The same.

Points out a few errors in the 'Life'.

## THOMSON, John M.

325. October 18, 1881.
Arts Club,
Hanover Square.

Is sending dichroic crystals, and describes their method of growth.

THOMSON, Sir Joseph John. 1856 - 1940.

324. February 1, 1906.
Cavendish Laboratory,
Cambridge.

Regrets inability to attend SPT's lecture. Describes process at Siemens and Hulckes for production of nitrates from the air.

THOMSON, William. 1st Lord Kelvin. 1824 - 1907.

326.	February 27, 1882. London.	Draft. SPT to Sir William. Enquires about detail of construction of receiver, referred to in Maclean telephone case, once demonstrated by Sir William at a B.A. meeting.
327. 1-2.	March 1st, 1882. University, Glasgow.	Dictated. Gives details of action of disc in relation to electromagnet, used in receiver.
328.	December 19, 1890. The same.	Discusses spelling of their respective names; family crests, etc.
329.	January 23, 1891. p.m. Glasgow.	Postcard. Thanks for copy of Gilbert of Colchester.
330.	February 24, 1891. The same.	Dictated. Is writing to Electrical Review about S.A. Varley's 'vile insinuation against Jenkin of false- hood'.
331.	May 24, 1893. 6, Cadogan Place.	To Kennedy. Technical details of reading of wattmeter.
332.	June 21, 1893. The same.	Dictated. Will visit SPT to see 'pyroelectric experiments', etc.
333.	June 30, 1893. The same.	Dictated. Thanks for information on quartz, and experiments he saw.
334.	July 6, 1896. Glasgow.	Thanks to the F.T.C., for the address received on the occasion of the Jubilee of his Professorship.
335.	October 12, 1896. Netherhall.	Dictated. Thanks for Kepler's paper. Observations on appearance of 'green ray'.
336.	January 17, 1899. Glasgow.	Appreciation of honour of being made first Honorary Member of the I.E.E.

337. 1-2.	October 10, 1899. Netherhall. Printed, Life of SPT, p. 201.	Typewritten. Enquiries about effect of temperature on luminous paint, etc.
338. 1-2.	October 14, 1899. Netherhall. Printed, Life, p.202.	Typewritten. Thanks for information supplied. Hopes to visit SPT cannot attend E. E. dinner.
339.	February 6, 1901. Fleming's Hotel.	Hopes SPT will join deputation to see Lord George Hamilton.
340.	February 10, 1904. Netherhall.	Typewritten. Encloses subscription for Gilbert Tercentenary Fund.
341. 1-2.	September 8, 1904. The same.	Typewritten. Unable to attend oyster feast. Dissatisfied with explanations of radiometer: enquiry about publications on subject.
342.	September 11, 1904. West Hampstead.	SPT to Lord Kelvin, answer to 341; draft. Details of radiometer, with diagrams.
343.	December 19, 1905. Netherhall.	Dictated. Nominates J.J. Thomson for 1906, Nobel Prize in Physics.
344.	May 8, 1906. 15, Eaton Place, S.W.	Dictated. Thanks for Life of Faraday. Has complete confidence in SPT and his suggestion to write about Kelvin's scientific work.
345.	October 18, 1906. Netherhall. Quoted, Life, p. 284.	Typewritten. Lists the merits of his siphon recorder for submarine telegraphy.
346. 1-2.	January 8, 1907. Netherhall.	Typewritten. Refers to SPT as 'living encyclopaedia of all science' about projected experiment on Ether drift, which he discusses.
347.	January 23, 1907. Netherhall.	Typewritten. Thanks for letter about bibliography and electric experiments.
348.	July 7, 1849. Hull.	Frederick Fuller to William Thomson. Difficulties of travelling to Denmark because of quarantine for cholera, etc.

349. July 16, 1849. Hotel Royal, Copenhagen. Frederick Fuller to W. Thomson. Arrangements to meet in Sweden.

350. September 6, 1849. Stockholm.

[ To his aunt, Mrs. Gall. ] Details of his Swedish travels. [ See 'Life of Kelvin', vol. 1, pp. 218 - 219. ]

351. October 14, 1849. St. Peter's College, Cambridge. Frederick Fuller to W. Thomson. Cambridge gossip, etc.

352. April 9, 1850. The same.

The same to the same. Thanks for hospitality in Glasgow, etc. - his uncomfortable return journey to Cambridge, on five different rail-roads.

353. Jun 9, 1908. 'Morland.'

SPT to the Registrar, Peterhouse. Enquiry about Frederick Fuller.

354. June 13, 1908. 9, Palace Road, Kingston. Frederick Fuller to SPT. Delighted to help with the biography; their holidays together, etc.

355. March 29, 1909. The same.

The same to the same. Details of Macpherson; his own recent severe operation.

THORPE, Sir Thomas Edward. 1845 - 1925.

379. January 6, 1916. Whinfield, Salcombe.

Thanks for a 'list of Rücker's.'

TILDEN, Sir William Augustus. 1842 - 1926.

380. n.d. Clifton College, Bristol.

Thanks for copy of an address.

483. June 15, 1916. Northmead, Middlesex. To Mrs. Thomson. Letter of sympathy on the death of SPT.

TOBLER, August. 1872 -

567. January 27, 1913. Winkelwiese 4, Zurich.

Enquiry about a memoir of Fleeming Jenkin; admiration of Kelvin 'Life'; SPT should write a biography of Varley.

TROTTER, Alexander Pelham. 1857 - 1947.

381. June 29, 1895. 28, Victoria Street. S.W.

n

Asks advice about publisher for a projected book of his lectures 'Royal roads to calculation'; describes the contents and scope.

TUTTON, Alfred Edwin Howard. 1864 - 1938.

382. March 15, 1909.41, Ladbroke Square,W.

Wishes to show right and left rotation of two quartz plates during lecture at Winnipeg. Asks for loan of equipment.

383. May 4, 1909. The same.

Thanks for loan of slides; is purchasing quartz specimens.

TYNDALL, John. 1820 - 1893.

384. [ 1850 ].

Hammond's Hotel,

St. Martin's Court.

Draft. Addressee unnamed. Wishes to follow up the magnetic studies he has commenced in German, and asks advice about the possibilities of obtaining part time literary employment.

385. December 20, 1879. Royal Institution.

Dictated; perhaps in Mrs. Tyndall's handwriting. Praises a paper by SPT; states his views on unilateral conductivity.

385a. June 2, [1882 ?]. Royal Institution. Note about the source of figures used by SPT for some article.

UNWIN, William Cawthorne. 1838 - 1933.

386. September 24, 1907.
Palace Gate Mansions,
29, Palace Gate, W.

Asks SPT to sign Dugald Clerk's proposal form for the Royal Society.

VAGNONE, Guglielmo Orazio.

387. December 19, 1913.

1-2. Via Roma 36, Turin. In Italian. Gratitude for SPT's past kindness; details of courses in electrical engineering in Italy; does not now wish to study this at an English University, but would like to work as trainee in some industry and asks for help in achieving this if possible.

#### VIAUDET, A.

388. December 12, 1881. Société Française de Physique, 44 Rue de Rennes, Paris. In French. Has received book on Electromagnetism and will review it shortly; need to teach physics in a new manner.

# VILLARI, Emilio. 1836 - 1904.

389. March 29, 1890. Istituto Fisico, University of Naples.

He is anxious about the possible loss of proof sheets of his translation which may have been lost in the post.

390. April 20, 1890. The same.

He is sending a further set of proofs by registered post; asks if SPT will consider correcting them.

## VOLTA, Alessandro. 1745 - 1827.

446. July 26, 1803. Como.

In Italian. To Carlo Raimondi.
Makes an offer for a house which
Raimondi has put on the market,
and which the Volta brothers would
like to buy. [See also CORTI,
Antonio.]

## VOLTA, Alessandro.

447. December 30, 1899. Milan.

In Italian. New Year greetings.

# WALKER, Miles. 1868 - 1941.

391. February 5, 1904. Old Trafford, Manchester.

Praises the latest edition of 'Dynamo Electric Machinery.'

392. November 7, 1915. Buxton.

Thanks for copy of 'Electricity and Magnetism'; 'the book will always be to me the authority for first principles.'

484. June 14, 1916. Little Haven ,Spencer Road, Buxton. To Mrs. Thompson. Letter of condolence on the death of SPT.

WARREN, Sir Thomas Herbert. 1853 - 1930.

545. March 31, 1910.

1-2. Athenaeum.

Expresses his pleasure at the quotation of his work at the end of the 'Life of Lord Kelvin'.

546. April 2, 1910. Hampstead.

Again expresses appreciation, thanks for letter from SPT.

WEBSTER, Sir Richard Everard. 1st Viscount Alverstone. 1842 - 1915.

393. June 26, 1891.

Dictated. Acknowledges receipt of information about Henderson, 'will speak to the Home Secretary on his behalf'.

394. November 1, 1909.

Acknowledges receipt of an Odde Volume.

528. February 22, 1910.

1-2. London.

Thanks for 'Life of Kelvin'; anecdotes of Kelvin: explanation of Kelvin's misapprehension about Bell's Telephone at the Glasgow B.A. meeting; anecdote of Sir Joseph Swan who was similarly mistaken about an electric lamp. Comments on his marine compass; his improved tachymeter.

WILKS, Sir Samuel. 1824 - 1911.

395. n.d. [before 1901].72, Grosvenor Street.

Will add his name to the memorial.

396. January 7, 1904. 8, Prince Arthur Road, Hampstead. Thanks for work on Gilbert. Enquiry about loadstone.

397. February 28, 1908. The same.

Asks SPT if he will support the Research Defence Society. Draft of SPT's reply, dated March 1, on back of the same letter. Will not support the society if it defends vivisection for purposes of instruction in medical schools: is heartily in favour of such research in the proper research laboratories.

WIMSHURST, James. 1832 - 1903.

398 - 39 letters, 1882 - 1894, principall on the design and
 436. performance of the influence machines designed by Wimshurst, and discussion of the experiments carried out with them by Thompson and himself.

ZEEMAN, Pieter. 1865 - 1943.

437. January 31, 1912. Stadhouderskade 158, Amsterdam. Thanks for packet; recalls former B.A. Portsmouth meeting with pleasure; does not know who will represent the Academy at the July celebration [250th] of the Royal Society.

#### MANUSCRIPTS

- 595. Lecture ... on the Compass. Saturday, April 20, 1907. Typescript, 35 ff. [Studies in Magnetism, at the Royal Institution.]
- 596. Myths of the Magnet, and other Essays Magnetical. 1 f. A list of projected titles for articles, etc.
- 597. Legends concerning the Lodestone. 13 ff.
- 598. The Lucky Horseshoe. 12 ff.
- 608. Memorandum concerning the affairs of the Gilbert Club. November, 1915. 1 f.
- 609 The Life of Lord Kelvin. M.S. Four bound volumes.
- 612. Presented to the Imperial College in 1951.

- 3 -

## **PHOTOGRAPHS**

etc.

- Thompson is drawn treading on a cat's tail in the shape of a report, a moon (labelled 'Electric Light') grinning in the background. The caption is as follows:
  - "A little further enquiry must have shown the makers of the report, how completely misinformed they were." Professor Thompson's letter on Mr. Kitt's report.
- Photograph of Professor Thompson with a group of friends, which includes Otto Lummer, seated outside a restaurant.

  Most of the party are in full academic dress. Probably taken in Breslau in August, 1911. 9" x 6". Mounted.

  There is a description of the occasion when the photograph might have been taken in the 'Life', p. 340.

- 615, Two photographs taken by J. Russell, probably both about
  616.

  1910. In one the Professor is shown standing in his laboratory, (this is reproduced facing p. 148 in the 'Life.') In
  the other he is seated working at his desk. 8" x 6". Mounted.
- 617. Cartoon, by L. R. Jacobs, from 'Electrical Engineering',
  December 4, 1913. "Experiments in terminology; what
  might happen." Print. (Reproduced, without the caption,
  in the 'Life', facing p. 138.)

See also the photograph enclosed in the letter from Sir James Crichton - Brown, no. 609.

- 618. Portrait, head and shoulders, by Elliott and Fry. Framed.  $17\frac{1}{2}$  " x  $23\frac{1}{2}$  ".
- 619. Christmas card, 1899, from Professor and Mrs. Thompson.

  Designed by the Professor.
- A collection of photographs, etc., of Lord Kelvin, from 1870 onwards. They include a number of portrait studies by T.R. Annan and Sons of Glasgow, the photograph taken in 1888 by Miss Agnes King, and three small photographs of Kelvin at Netherhall, experimenting out-of-doors with an azimuth mirror, on September 27, 1904.

  There are also three photographs, copies of prints and paintings, of the first wife of Lord Kelvin.

