ARMSTRONG PAPERS Second Series

Imperial College Archives

IMPERIAL COLLEGE
University of London

ARMSTRONG PAPERS
Second series

List of the correspondence and other papers of Henry Edward and Edward Frankland Armstrong.

Compiled by Jeanne Pingree

IMPERIAL COLLEGE ARCHIVES
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Introduction

Miss Nora Armstrong, the daughter of Professor H. E. Armstrong, FRS, presented a collection of her father's correspondence and other papers to Imperial College in 1958. A list of these papers was circulated in 1967. In 1968 Miss Armstrong then gave a further set of papers to the college which included some of the correspondence of her brother, Edward Frankland, in addition to her father's papers. This second series of Armstrong material is listed here. It is not described in full as many letters are only of ephemeral interest. Unless otherwise described, all letters were written to Professor Armstrong and are holograph or signed typewritten letters.

Abbreviations

BA	British Associati	on for the	Advancement	of Science.

B D C British Dyestuffs Corporation.

CGLI City and Guilds of London Institute.

CJ The Central. Journal of the old students of ... the Central Institution. Vol. XXV, June 1938. Armstrong Memorial issue.

E F A Edward Frankland Armstrong.

Eyre J. Vargas Eyre: Henry Edward Armstrong. London, Butterworths, 1958.

H E A Henry Edward Armstrong

JCS Journal of the Chemical Society.

Outline of the careers of Professor Armstrong and his son.

1. Henry Edward Armstrong.

1848	Born 6 May, son of Richard Armstrong, at Lewisham.
1865 - 7	Student at the Royal College of Chemistry.
1867 - 70	Student at the University of Lepizig: awarded PhD degree.
1870	Appointed as a part time lecturer at St. Bartholomew's Hospital, and Professor of Chemistry at the London Institution.
1874	Published 'Introduction to organic chemistry.'
1875	Joint Secretary, with W.H. Perkin, of the Chemical Society.
1876	Elected Fellow of the Royal Society.
1877	Marriage to Louisa Lavers.
1879	Appointed Professor of Chemistry at the Cowper Street Schools (later Finsbury Technical College.)
1883	Senior Secretary of the Chemical Society: Finsbury Technical College opened.
1884	Appointed Professor of Chemistry at the Central Institution (later City and Guilds College.)
1892	Awarded honorary LLD, University of St. Andrews.
1893 - 5	President of the Chemical Society.
1897	Visited the USA as lecturer for the Lawes Agricultural Trust.
1911	Appointment at the City and Guilds College terminated. Awarded the Davy Medal of the Royal Society.
1913	Closure of the Chemistry Department at the City and Guilds College: appointment as Professor Emeritus, Imperial College.
1937	Died 13 July.

2. Edward Frankland Armstrong.

1878	Born 5 September at Lewisham. Educated St. Dunstan's College.
1895	Occasional student at the Royal College of Science.

1896 - 8	Student at the Central Institution: awarded ACGI (Chemistry)
1898	Student at the Universities of Kiel and Berlin.
1901	Awarded PhD degree, University of Kiel.
1902 - 3	Salter's Research Fellow, Central Institution.
1905	Appointment as Chief Chemist, Huntley and Palmer.
1907	Marriage to Ethel Mary Turpin.
1911	Received honorary LLD, University of St. Andrews.
1914	Appointment as Technical Adviser, later Director, Crosfields.
1920	Elected Fellow of the Royal Society.
1922 - 4	President of the Society of Chemical Industry.
1925	Appointed Managing Director, British Dyestuffs Corporation.
1928	Resignation, to become consultant in London.
1935	President of the Association of British Chemical Manufacturers. Death of his son, Kenneth, in Alpine accident.
1939 -45	Scientific Adviser to the Ministries of Home Security and Works.
1945	Died, 14 December, after an operation for appendicitis.

A PERSONALIA

- Royal School of Mines and Science Applied to the Arts. Tickets of admission to lectures on Organic Chemistry, etc., for HEA, sessions 1865-6 and 1866-7. Signed by Trenham Reeks, Registrar.
- Government School of Mines. Royal College of Chemistry. Receipts for payment of fees for admission to work in the laboratory, signed by W. Valentin. Six items.
- The feast of the blues. By the author of 'A chemical review'. Printed for private distribution. London, 1865. 7pp. 15 cms.

A poem about a dinner at the 'Albion' attended by Abel, Hofmann, Odling, etc.

- 4 Autographs. R. W. Bunsen. A small envelope containing autographs by Bunsen and others.
- The Jacksonian Professorship. Printed application, 1 April 1876; containing original testimonials from W. Morant Baker, Hon. Secretary to the Medical School, St. Bartholomew's; Henry Roscoe; Dr. W.J. Russell; and a copy of a testimonial from Professor Frankland, 1874-5.
- 6 Testimonials for HEA as a candidate for the above. 12 pp. Printed.
- 7 '1884 1885. Finsbury Technical College. Central Institution'. Notebook with a large number of letters, etc., pasted into it. 23 cms.

 Correspondence and memoranda: notes by HEA and letters from

members of the staff of the two colleges.

- Scheme for the organisation of the Central Institution 1884. 20 pp. Printed.
- 11 City and Guilds of London Institute. Preliminary programme for the Central Institution. 9 pp. Printed.
- 31 Finsbury Technical College. Printed memorandum on its organisation, from HEA, W.E. Ayrton, A.F. Brophy and J. Perry. 4pp. Pencilled note says 'Dec. 1883'. [Printed in full, CJ, pp. 31-2].
- 33a 10 December 1884. Draft of a letter to the members of Sub-Committee C, of the City and Guilds of London Institute, on the administration of Finsbury Technical College. 9pp. [See CJ, pp. 40-4, printed in full].
- 37a 13 December 1884. Draft of letter from HEA to Sir Frederick Abel on the organisation of the Chemistry Department at the Central

75

	Institution: appointment of Dr. Miller, etc., 2pp. Quoted, CJ, pp. 53-4.
38a	1 December 1884. Draft of letter from HEA to Philip Magnus, Principal of the Central Institution, on the appointment of Dr. [Alexander Kench] Miller as his assistant. 2pp.
39	15 December 1884. Letter from Sir Frederick Abel stating that the Council of the CGLI agrees to the appointment of Dr. Miller.
41	16 December 1884. Reply from Magnus stating the approval of the appointment at a salary of £150 p.a.
44a-49	Central Institution examination papers and marking list, 1884.
52	14 January 1885. Draft of letter to Magnus. Asks if Mr. Waterhouse can proceed with laying the floor, and other building works, in the chemical laboratories.
53	19 January 1885. Letter from Magnus to HEA stating that the various works are to be carried out at once.
54a	31 January 1885. Draft of letter to E.C. Robins on the possible award of a Fellowship in Applied Chemistry by the Dyers' Company. 2pp.
61a	7 March 1885. Draft of letter to Professor W.C. Unwin from HEA, W.E. Ayrton and O. Henrici asking that the chairman of the Board of Studies should be present at meetings of Committee A when educational matters are under discussion.
62	7 March 1885. Letter from Olaus Henrici on the matter of representation enclosing the probable original of (61a) above.
64-68	March 1885. Three letters from W.C. Unwin on the question of representation.
70	23 March 1885. Reply from HEA to Unwin, stating their views: 'we are not at present able to comprehend how the work of the Central Institution is to be carried on to the advantage of the Institution unless this principle of representation is adopted. Draft.
73	28 April 1885. Letter from Philip Magnus stating that Raphael Meldola had been appointed Professor of Chemistry at Finsbury. Draft of reply from HEA stating that he is not now clear about the extent of his own duties at Finsbury, on the back of the letter.

1 May 1885. Reply from Magnus 'you are absolved from attendance

at the Finsbury College from the commencement of this term'.

- Long draft memorandum, in pencil, from HEA [to Committee A ?] on the views of Ayrton and himself on the organisation of Finsbury.
- 78 27 October 1883. Finsbury Technical College. Draft of letter to Magnus from HEA expressing his strong dissatisfaction with alterations which Magnus had made in the agreed timetable.
- 9 May 1884. Letter from W.E. Ayrton to Sir Frederick Bramwell, from Finsbury Technical College. Application for the post of Professor of Physics at the Central Institution.
- 30 April 1884. Letter to HEA from Philip Magnus, stating that he had been appointed Professor of Chemistry at the Central Institution, at a salary of £1,000 p.a., the appointment to be renewable annually.
- 1 August 1884. Letter from Philip Magnus, sending a copy of a resolution of the Executive Committee, and hoping that during the vacation HEA can proceed with the preparation of drawings for the fittings in his Department.
- Copy of a resolution that Mr. Waterhouse should consult with the Director and the professors on the preparation of drawings for the fittings. (£4,000 was to be spent on the Chemistry Department).
- 3 June 1885. Draft of letter from HEA to W.C. Unwin on the recommendation of staff for his Department. 'It is unnecessary for me to say anything about Dr. Perkin', etc.
- 6 June 1885. Letter from Magnus asking why HEA is not giving a summer course; requesting a list of apparatus; giving arrangements for the projected dynamo room.
- 7 June 1885. Letter from S.P. Thompson. An enquiry about the period of Dr. Miller's appointment at Finsbury, etc.
- 91 13 June 1885. Draft of letter to Magnus from HEA. 'I deeply regret being compelled by circumstances to see my name omitted from the Syllabus of summer courses'. The laboratories were not yet fitted up and he could not superintend this work and also prepare for the courses.
- A 8 Complimentary banquet in honour of Professor Henry Edward Armstrong. 13 May 1911. Menu, table plan, reprint of article from the 'Chemical News'. 2 June 1911.

Presentation volume, given by staff and students of Chemistry A 9 to Professor and Mrs. Armstrong on the occasion of their Golden Wedding, 27 April 1927. Illuminated address and lists of names, etc., bound in dark brown leather tooled with gold, in matching silk lined slip case. City and Guilds College. Jubilee anniversary dinner in honour A 10 of Professor Armstrong, 4 February 1935. Signed menu card. See Eyre, p. 210. Jottings and Cuttings. A scrap book with obituary notices of A 11 Professor Armstrong's death. Obituary notices from the Journal of the Institute of Brewing. A 12 Royal Society, etc. Off-prints. Catalysts' Club dinner in honour of HEA. 1951. Menu, etc. A 13 Press cuttings about Edward Frankland Armstrong: A 14 'The Chemical Age', 8 July 1922, with cartoon, etc.

PHOTOGRAPHS, etc.

 \mathbf{B}

- One packet of photographs of HEA and others. Ten items: mounted 'cartes de visite' of various sizes. There is one of HEA, with the queried date '1875' on the back; two of Mrs. Armstrong; a photograph said to be Alexander Pedler, another of Adrian Brown, etc.
- Packet of photographs of HEA and his family, taken over a period of about ten years; groups on holiday, walking, etc. 43 items. One group includes Sir William and Lady Perkin.
- 3 Small postcard with photograph of scientific apparatus and the message 'Wishing success for your experiments in 1898'.
- Group photographs of HEA with staff and students at the Central Institution, from 1884. Two unmounted and three mounted photographs. One is reproduced in Eyre's biography, facing p. 130. Another in CJ, facing p. 69.
- 5 Photograph of a group of students at the Royal College of Science, with an accompanying letter from (William) George Valentin to HEA, 28 April 1929.
- Photograph of EFA, with five others, all in a German students' uniform, peaked cap, etc. Probably taken between 1899 and 1902.
- Two small photographs of EFA, with a second copy of each, taken in later life: two of the photographs are stamped '28 January 1937'.
- A further small photograph, with the caption '... Chemical Adviser, E.F. Armstrong' in a packet attached to the Prospectus for St. Dunstan's College, Easter, 1891.
- 9 The London Institution. Print, 4 June 1819. Reproduced in CJ, facing p. 12.

GENERAL CORRESPONDENCE

ABEL, Sir Frederick Augustus. 1826 - 1902

1 December 1895 Imperial Institute. Sends extract from a letter which he has received from India about the turpentine enquiry, etc.

ADAMS, John Crouch. 1819 - 1892

2 31 March 1875 18 Montpelier Crescent Brighton.

To Warren De La Rue. Urges that H E A should put his name before the members of the electoral roll for the Jacksonian chair.

ADKIN, Robert

C

3 29 September 1864 Lewisham.

Addressed to 'Master H Armstrong / Gibralter.' Additions to his butterfly collection; a 'moddle' regatta on the Heath.

ALEXANDER, William

9 May 1925 43 Hertford Street Mayfair.

To E F A. Congratulations on his appointment to B D C . Typewritten.

ANDERSON, Sir John. Viscount Waverley. 1882 - 1958.

5 14 September 1939 Home Office.

To E F A. Invitation to serve as a member of the Civil Defence Research Committee. Typewritten.

19 September 1939 Home Office.

To E F A. Glad that he will join the Committee. Typewritten.

ANDREWS, Thomas. 1813 - 1885.

20 January 1876 Queen's College, Belfast. Society on 28 April 1876.

Arrangements for his lecture to the Chemical

8 24 January 1876 The same.

Alterations to the title and subject of his lecture; his appointment as Bakerian lecturer to the Royal Society.

ARMSTRONG, Edward Frankland, and ARMSTRONG, Henry Edward.

- Letters from EFA to his father (excepting no. 11, to his mother) from Berlin, 29 March 1899 to 1 May 1902, about his studies and research at the Chemisches Institut, under Van't Hoff and Emil Fischer; accounts of his research and descriptions of student life, etc.; comments on the attitude of the Germans to English people and events; meetings with German chemists; later work on sugars, etc. Letter no. 19 has an account of the opening of the Hofmann House; letter no. 31, an account of the PhD examination; letter no.36, an account of his career, as an application for a post at the Goldsmiths' Institute in 1901.
- 47 50 Letters from Copenhagen, describing EFA's biochemical research there with Hansen, August-September 1904.
- Correspondence between the father and son, 1906 11, 1928, 1931; general subjects, and detailed accounts of their joint research on analysis of plant extracts, etc. There is a letter to EFA from Miss M. Wheldale of Newnham College on this subject.

Many of the letters are extremely long particularly those written from Germany.

- 114 126 Miscellaneous notes and correspondence on plant analysis, etc.
 One folder. Letters from Sir David Prain on plant cuttings, 1911;
 notes on Vicias.
- Notes on aldehydes, n.d. Probably written by HEA.
- Tests for organic acids, alkaloids, sugars, etc., required for the first MB examination at London University. C Firth, S[t.] Bartholomews] H[ospital] June 1871. 6 ff.
- 'Cn Valency with special reference to methods of writing rational formulae and the existence of so-called molecular as distinct from atomic compounds'. 25 ff.
- Diary of a visit by HEA to the USA with the Mosely Commission, 1903. 22 pp. Typescript.
- 'Autobiography'. 16 ff. Typescript. Part of the article by HEA in 'The Central', vol. 35, June 1938, pp. 3 8.

ARMSTRONG, Kenneth. 1909 - 1935.

131 192?
Hotel Victoria,
Fort Victoria
South Rhodesia.

To his parents, Dr. and Mrs. E F Armstrong. An account of his visit to Ladysmith, the National Park, the Victoria Falls, etc. 6 ff.

[7 August 1932] 618 Kearney Street, Portland, Oregon.

To H E A. Observations on conifers; his work on chlorophyll; comments on geological formations, Grand Canyon, etc. 2 ff.

John Winthrop House Cambridge, Mass.

To H E A. An account of his work and views on chlorophyll and a friend's work on the carotenoids of deep sea crustacea. 2 ff.

ARMSTRONG, Richard. 1827 - 1884.

134 - Thirteen letters to his son 'My dear Pip' (HEA) in Leipzig, from
 146 Lee, 27 November 1867 to 13 September 1868, on family matters,
 comments on public affairs, etc.

ARRHENIUS, Svante August. 1859 - 1927.

147 14 May 1911 Gambier, Ohio.

Details of his future movements after he leaves New York; cannot yet say how long he will stay in London.

ASHLEY, Sir Percy. 1876 - 1945.

148 29 May 1941
Cotton Control
Ministry of Supply,
Manchester.

To E F A. Brief note. Thanks for letter of sympathy.

149 13 November 1941 The same.

To E F A. Discussion of the possible co-option of a representative of the Institution of Civil Engineers on the Executive Committee of the British Standards Institution, etc. Typewritten.

ASTON, Joseph K

150 17 October 1873
Bounty Office
Dean's Yard
Westminster.

Observations on streams springing from rock in the valleys near Mont Blanc; and on the effect of water, possibly impregnated with iron, on quartz, of which he sends a sample, enquiring H E A 's opinions on the matter.

BAIRD AND TATLOCK

151 2 June 1894 14 Cross Street Hatton Garden. From A L Gower. States the results of his firm's enquiries about the manufacture of absolute alcohol; the trade unable to compete with the Germans.

BAKER, Julian Levett. 1873 - 1958.

152 4 February 1941 The Laboratory, Stag Brewery, Pimlico. To EFA. Praise of the Armstrong Memorial Lecture and comments on HEA's influence.

BALFOUR, Arthur James. 1st Earl of Balfour. 1848 - 1930.

153 20 December 1895 Whittinghame.

Dictated. Regrets his inability to attend a lecture by Professor Dewar.

154 14 July 1908 4 Carlton Gardens. Dictated. Thanks for a copy of address by HEA; sends one of his own papers.

BARLOW, William. 1845 - 1934.

156 25 January 1927 Elm House, Stanmore. Observations on the characteristics and relationship of the crystals of tetraphenylmethane and tetraphenylsilicon.

BENNETT, Richard Bedford. 1st Viscount Bennett. 1870 - 1947.

158 15 October 1945 Juniper Hall, Mickleham, Surrey. To EFA. Typewritten invitation to a complimentary lunch for the retiring President of the Royal Society of Arts.

159 14 November 1945 The same. To EFA. Congratulations on his recent work for the Society of Arts.

BERNSTHEN, Heinrich August. 1855 - 1931.

160 10 April 1889 Mannheim. In German. His interest in HEA's research and his own work on nahthalene; asks for advice about dichlornaphthalene.

BOLTON, Frank

161 27 January 1874 Broad Sanctuary.

Detailed descriptions of the analyses of river water, crystals, etc. to be made by HEA on visit to the Logrono sulphate of soda mines; asks for his opinion on the chemical plant required and potentialities of the property; details of expenses, etc; fee of fifty pounds, etc. 2 ff.

BOWSER, Rev. Sidney W

1853 - 1928.

163 26 May 1871 Cromwell house,

Hackney.

Thanks for HEA's kindness and attention at the chemistry classes at the London Institution.

BRODIE, Sir Benjamin Collins. 1817 - 1880.

26 February 1874 164 Brockham Warren, Reigate.

Thanks for copy of 'Introduction to the study of organic chemistry'; which he praises. His disapproval of the use of methods of 'pictorial chemistry' when conveying fundamental facts.

BROWN, Horace Tabberer.

1848 - 1925.

165 2 December 1912 52, Nevern Square, Kensington.

To EFA. Thinks that EFA should be proposed for election to the Royal Society, and asks him to amend the enclosed paper drawn up in conjunction with Sir William Pope.

BRUNNER, Sir John Tomlinson. 1842 - 1919.

21 June 1915 166 Silverlands, Chertsey.

Dictated, with amendments by Sir John. Comments on Ludwig Mond; HEA has too low an opinion of Lord Haldane; the firm's production of ammonium nitrate; about to under take purification of TNT on national scale, etc. 2 ff.

BRUNTON. Sir Thomas Lauder, 1844 - 1916.

167 6 April 1875 Library,

St. Bartholomew's

Hospital.

A testimonial in support of HEA's application for the Jacksonian Professorship.

BURR, Edmund C

16 October 1865 168 Dresden.

An account of his rambles through Saxony and Bohemia with a party of other Americans; the scenery, etc., too civilised for him compared with the vast prairies at home, etc. 2 ff.

16 April 1867 169 Leipzig.

Observations on new method for making gas analyses; Kolbe's new laboratory 'best in the world'; remarks about Stoddard's laziness, etc. 2 ff.

170 31 May 1867 His discovery of a method of making chloral (sketch); life rather dull; a ride on a velocipede, etc.

7 August 1867 171 Universitäts Laboratorium. Arrangements for HEA's studies; Kolbe's praise of Frankland; the need to reserve a place in the laboratory; purchase of apparatus needed, etc.

CARO, Heinrich. 1834 - 1910.

Mannheim.

		and the second s
173	8 January 1901	To EFA. In German. Congratulations on achieving
	Mannheim.	PhD and thanks for copy of dissertation. Has not
		been able to follow its method of argument comple-
		tely as he has not kept up with new methods.
174	2 March 1904	To HEA. Thanks for good wishes on his 70th

birthday.

CARPENTER, Charles Claude. 1858 - 1938.

175	1 March 1930 The White Lodge, Sandgate, Kent.	To EFA. The history of his election to the Athenaeum; pleased to have received so much distinguished support, with thanks to EFA.
176	8 March [1930] The same.	To EFA. Pleasure at his election to the Club; comments on 'Ulysses' which he will lend to EFA. Admiration of George Moore's 'Memoirs'.

CHATFIELD, Alfred Ernie Montacute. 1st Baron Chatfield. 1873 - 1967.

177	17 December 1945	To Mrs. EFA. Letter of sympathy on the death
	House of Lords.	of EFA; 'his loss is a national one'.

CHEMICAL SOCIETY, London.

178	14 October 1878 Burlington House.	Faraday lecture. Dinner for Professor Wurtz. Preliminary list of stewards. Printed.
179	1884	Dinner to Dr. Perkin. List of stewards. Printed.
180	4 May 1926 55, Granville Park, Lewisham.	Draft. Letter from HEA to the President of the Society, resigning from the Council and the Society.
181	22 October 1937 Burlington House.	To EFA from the President of the Society, F.G. Donnan. Conveys resolution of the Council expressing profound sorrow at the death of HEA. Typewritten.
182	[1941]	Draft. Notes on the centenary of the Society by EFA. 3 ff.

CHEMICAL SOCIETY. London. Dining Club.

183 14 November 1872 to	Notebook. Minutes of proceedings of the Club
14 January 1875.	from its foundation, with lists of persons present
	at the dinners, mostly held at the Café Royal.
	Some letters of recommendation of membership
	are pasted in and there are also a number of loose
	postcards about attendance at dinners from Frankland
	and others, January and February, 1897, 48 ff.

186	5 August 1915
	Drumlamford
	Barrhill, Ayrshire.
187	

To H E A [?] from Sir Phipson Beale, Bt. (1839 -1922) Covering letter for notes on the 'B' Club of the Society. 6 ff.

Dining Clubs. An account of the 'x', 'B' and Chemical Society Dining, clubs. Typewritten. Includes two pages of lists of names. 13 ff.

188 12 April 1938 Burlington House. From the Librarian of the Chemical Society, F W Clifford, to E F A. Describes 'B' Club material in the library and gives information about names in the 'typed lists' (see above.) Typewritten.

CITY	AND GUILDS OF LONDON	INSTITUTE
189	13 May 1879 9: York Place Huddersfield	Copy. From George Jarman, to E C Robins. Definition of a technical school; detailed description of accommodation required for instruction in dyeing, and observations on the character of suitable courses in wool and cotton dyeing. 4 ff.
190	17 December 1879 8 Marlborough Road St. John's Wood.	From E C Robins. Arrangements for meeting H E A to discuss plans for the Cowper Street Schools.
191	n.d.	Memorandum [by E C Robins?] expressing Mr. Robin's opinion that the Cowper Street plans should be reconsidered.
1072.2	7 - L 1	

192 [December 1879] The last two pages of the report by E C Robins to the sub-committee on the Cowper Street Schools. Printed in the C G L I Report to the Governors for the year ending March 1880, Appendix III, p. 42. 2 ff.

194 -1879 - 1896

193

203

Plans of the Schools. 4 ff. Probably the provisional plans mentioned by Eyre, p. 73.

204 25 July 1910 Printed reports etc. issued by the Institute and others, including the anonymous pamphlet 'Is the Central College a failure?' 23 April 1896.

Gresham College.

From A L Soper, Assistant Secretary. Informs H E A of his reappointment as Professor of Chemistry for the next year. Typewritten.

205 18 February 1911 The same.

From A L Soper. Informs H E A that the Delegacy of the City and Guilds College does not intend to renew his appointment. Typewritten.

206 18 February 1911 The same.

From A L Soper. Expression of his sincere regret that he has been called upon to send the above letter.

207	19 February 1911	Draft. From HEA to A.L. Soper. 'I need scarcely say that so abrupt a termination a period of service extending over 30 years comes as a severe shock to me'.
208	20 February 1911 Dela hay House, 15 Chelsea Embankment.	From Sir John Wolfe Barry. Would like to discuss matters with HEA. 'I am sure everyone will wish to make the change as agreeable to you as possible'.
209	21 February 1911	From HEA to Sir John. Arrangements for meeting; asks for a week to think things over. Draft.
210		Resolution of meeting of the Executive Committee on 6 March 1911 expressing appreciation of the services of Professors Armstrong and Henrici and their appointment as Emeritus Professors. Typewritten. Signed by the Chairman, Wolfe Barry and the Hon. Sec. Sir John Watney. 2 ff.
211	10 March 1911 Delahay House.	From Sir John Wolfe Barry. Covering letter for the above resolution, with a further recommendation from the Committee about an honorarium and the reappointment of HEA at half salary until September 1913. Typewritten. 2 ff.
212	22 March 1911	From A. L. Soper. Notification of the extension of HEA's services until September 1913 'by which time the present students of the Chemical Department will have finished their diploma courses' at half his present salary. Typewritten.
213	7 April 1911	From A.L. Soper. The Council have adopted the resolutions about the honorarium, etc., for HEA proposed by the Executive Committee.
217		City and Guilds (Engineering) College. Students who took a course in chemistry. 14 pp. Type-written. Drawn up by John Walker, Registrar.

CLOWES, Frank. 1838-40c - 1928.

219 19 November 1872 Queenswood College. His reasons for decision not to apply for the post at Owen's College; finds life at present rather lonely; his researches, etc.

COWPER STREET SCHOOLS:

see CITY AND GUILDS OF LONDON INSTITUTE, above.

CROOKES, Sir William. 1832 - 1919.

CROOK	ES, Sir William. 1832 - 1	919.
221	14 January 1885 7 Kensington Park Gardens.	Reasons for diffidence in accepting nomination as President of the Chemical Society.
222	3 June 1887 The same.	Arrangements for staging to be set up by the Office of Works outside the Chemical Society [for the Golden Jubilee celebrations]; details of address to the Queen, etc.
223	19 September 1887 The same.	Arrangements for the A G M of the Chemical Society; congratulations [on tenth wedding anniversary ?]
224	17 December 1887 The same.	Reasons for disqualifying a paper by Dr. Bailey in the 'Proceedings '.
225	19 December 1887 The same.	Asks H E A to give only the title of Bailey's paper and omit the few words he had written about it, etc.
226	30 March 1888 The same.	Comments on remarks about him in the 'Times.' Typewritten.
227	3 April 1897 The same.	Congratulations on H E A's election to the Athenaeum.
228	25 June 1897 The same.	Thanks for congratulations on his knighthood.
229	15 September 1900 Dixcart Hotel, Sark.	Thanks for papers sent by H E A.
230	25 May 1903 7 Kensington Park Gardens.	Sends notes on his experiments with crystals of saccharin. Type-written.
231	14 March 1905 The same.	Brief note, Cannot attend ballot at the Chemistry Club. Typewritten.
232	9 November 1906 The same.	Enquiry about a research chemist who would be suitable for post in the Woolwich research laboratory. Typewritten.
233	5 July 1910 The same.	Brief note. Sending ten grammes of yttria, etc. Typewritten.
234	23 November 1910 The same.	Arrangements for a discourse by H E A at the Royal Institution; gives him advice on lecturing. Typewritten.
235	8 June 1912	Interest in H E A's work on rare earth elements.

The same.

Offer of some scandia. Typewritten.

236 3 Novem The sam	informat	te. Has been unable to obtain any ion about manganese in ductile ypewritten.
237 27 Janua The sam		te. Thanks for compliments on 'my and other work'. Typewritten.
238 18 June The sam		te. Asks HEA to write notice on ller for the Royal Society. Typewritten.

CROSFIELD, George. 1877 - 1962.

238 21 April 1915 To EFA. He has resigned from Brunner, Mond, on account of the firm's treatment of his brother; thanks for helpful assistance with the technical branches of the business. Written in pencil. 2 ff.

CROWE, Sir Edward Thomas Frederick. 1877 - 1960.

240 14 December [1945] To Mrs EFA. Letter of sympathy on the death of EFA 'his loss is also a national disaster'.

DAY, James John

232		
241	23 November [1867?] Walnut Tree house, Leyton.	Has plans to visit Leipzig; various commissions for HEA; comments on the report on the Cumberland and Welsh waters; his experiments on the 'artificial river' and news of acquaintances, Meldola, Clowes, etc.; Chapman's paper on the action of bad water on birds; mishaps with apparatus in the laboratory. 2ff.
242	14 December [1867] The same.	Description and sketch of gas apparatus; his method of making calibrations and calculating results; the Fenian's attempt to blow up Clerkenwell prison; details of his prospective trip to Leipzig.
243	4 April [1868] 173 Gloucester Road, Regent's Park.	His return from Holland; Frankland has appointed him as an assistant to work in the Westminster laboratory for the River Commission; a description of the decorations at Drury Lane where he saw 'Semiramide'; news of various friends.
244	6 May [1868] The same.	Describes Kolbe's report on researches at Leipzig in the JCS; his own investigations on water samples, etc.

245 21 June 1868. The same.

Account of experiments on artificial waters; the laboratory is very busy; his visits to the opera; long and detailed description of McLeod's new gas analysis apparatus (sketch); mentions other new equipment in the laboratory.

27 March 1869. 246 53 Bedford Square Comments on Frankland's refusal of the Presidency of the Chemical Society; Wanklyn's views on triatonic sodium, and other papers, read at the Chemical Society; has just been appointed a Fellow; very busy at the laboratory, which Frankland visits rarely; Frankland's research on atmosphere with Lockyer.

DEBUS, Heinrich. 1824 - 1916.

247 8 April 1875 Athenaeum Club. To the electors of the Jacksonian Professor ship. Testimonial for H E A.

DE LA RUE, Warren. 1815 - 1889.

248 5 April 1875 73 Portland Place. To the electors of the Jacksonian Professorship. Testimonial for H E A.

DEWAR, Sir James. 1842 - 1923.

65 letters from Dewar to H E A, 14 October 1893 to 17 May 1920, 313 and one from Lady Dewar, 20 May 1924 (313 a). The letters are mostly confidential, on matters relating to developments in research on hydrogen, liquid hydrogen, etc; internal politics of the Royal Society and of the Royal Institution, with unrestrained comments on the principal officers of each, particularly the successive Presidents of the Royal Society, Geikie, Crookes, Thomson and Rayleigh; his lawsuit with the Crookes family; Lady Dewar's health, etc.

DONNAN, Sir Frederick George. 1870 - 1956.

314	28 October 1937	To E F A. Will bring the matter of H E A's
	23 Woburn Square	Frankland lecture before the Council of the
	W C 1	Chemical Society, etc. Typewritten.
315	9 November 1937	To E F A. Asks for the M S of the lecture.

The same. that he may read it before its publication is considered.

8 May 1944 316 To E F A. Wishes to return papers relating to Roseneath, H E A; he had been unable to persuade Sir W. Hartley, Kent. Pope or Sir G. Morgan to write a memorial

notice of H E A for the Chemical Society.

Typewritten.

See also CHEMICAL SOCIETY OF LONDON.

DUISBERG, Friedrich Carl. 1861 - 1935.

317 6 January 1932 Leverkusen I.G. Werk. In German. Will gladly send copies of his papers, lectures, etc., and also material relating to the celebrations of his 70th birthday, etc. Observations on the current world economic crisis. 2 ff. Typewritten.

EVANS, Sir John. 1828 - 1908.

318 22 December 1904 Nash Mills, Hemel Hempstead.

Regrets that HEA was unable to attend a meeting [of the Royal Society of Arts?]; various matters relating to it.

FARMER, Sir John Bretland.

319 1 March 1930 St. Leonard's, Weston Rd., Bath. To EFA. Discussion of the problem of the direction of growth of climbing plants.

1865 - 1944.

320 16 July 1941 The same. Thanks for copy of obituary notice of HEA.

FERGUSON, John

321 21 October 1871 30 St. Vincent Ct., Glasgow. Asks if HEA will translate part of Wurtz' Chemical Dictionary.

FISCHER, Emil. 1852 - 1919.

The following three letters are in German and typewritten.

322 3 October 1907 2 Hessische St., Berlin. Arrangements for meeting in London, plans for his lecture there, which he will read from a script, etc.

323 5 October 1907 The same.

Thanks for the translation of his lecture by EFA; dwells again on the difficulty of speaking without a script, etc.; hopes to have HEA as a guest in November; unable to dine at the Athenaeum, etc.

324 12 October 1907 The same. To EFA. Thanks for the translation; observations on his paper on amygdalase; further comments on difficulty of learning the lecture by heart, etc.

FOSTER, Sir Michael. 1836 - 1907.

326 n.d.
Nine Wells,
Great Shelford,
Cambridge.

Discuses indexing of some papers, etc. Index slip enclosed.

FRANKLAND, Sir Edward.

1825 - 1899.

328 18 September 1888 Queen's Hotel, Manchester. Agrees that Japp is the best candidate for the Aberdeen appointment; has already written strongly to the Principal on the subject.

329 3 April 1890 The Yews, Reigate, Surrey. Gives emphatic support of W.H. Perkin as a candidate for election to the Royal Society. [He was elected the following June].

330 16 May 1894 The same. Arrangements for a 'Saturday to Monday' visit.

FRANKLAND, Percy Faraday.

1858 - 1936.

331 18 February 1928 Hotel 'Tembani' Paignton. Gives reference for information about water supply; regrets that they will be unable to see HEA in Edinburgh.

GASELEE, Sir Stephen .

1882 - 1943.

333 19 October 1938 Foreign Office. To EFA. Thanks for a letter; letters directly received from the USA have only praised the Prime Minister; would point out to taunters about refusal to make war that they 'live some 3,000 miles away from the nearest bomb'.

GILBERT, Sir Joseph Henry.

1817 - 1901.

334	29 January 1887
	Harpenden,
	St. Albans.

Answers an enquiry about papers on absorption of nitrogen; he and Sir John Lawes hope soon to write on this; importance of work of Frank Wolff, etc.

335 2 May 1890 The same. Arrangements for a display of photographs about experiments in fixation of nitrogen.

336 2 July 1892 The same.

Agrees with HEA that it would be interesting if Bernard Dyer would determine nitrogen in soils; he is now examining the potash contents; the soda lime process at Harpenden.

337	12 July 1890 The same.	Discussion of the relation between the incidence of rainfall and quantity of wheat production, etc. 2 ff.
338	28 July 1890 The same.	Sends papers on the subject of rainfall; invitation to look at experimental plants.
339	2 August 1892 The same.	Arrangements of a visit by HEA.
340	19 August 1893 The same.	Sorry not to have seen HEA; thanks for congratulations on his knighthood.
341	17 February 1894 The same.	Hopes to send in report of Dyer's paper.
342	27 July 1896 The same.	Hopes to send altered proofs for some article soon.
343	13 February 1897 The same.	Enquiry about lantern slides of experimental plants relating to the fixation of nitrogen question for a lecture.

GREGORY, Sir Richard Arman. 1864 - 1952

The following letters are to EFA.

348	30 October 1945 The Manor House Middleton on Sea.	Will gladly sign E V Evans' certificate for the Royal Society; short account of recent visit to Paris, representing the British Association.
349	5 November 1945 The same.	Delighted that EFA has 'been able to put science on the map of UNESCO.' Details of biography of Sir Norman Lockyer.' Lady Lockyer and Miss L. did not write a word in the book, but I wanted their names to appear as the authors as their personal tribute. I designed the whole scheme'

GROVES, Charles Edward. 1841 - 1920.

351	17 December 1872 17 Rodney Street Pentonville.	Enquiry about a reference for Graebe and Liebermann's method of preparing quinones, etc.
352	25 December 1872 88 Upper Kennington Lane.	Detailed description of his method of producing resoicin (sketch of apparatus.) Thanks for information about a post as librarian.

HANSEN, Emil Christian. 1842 - 1909.

360 30 June 1906. To EFA. Will be pleased to welcome him

Carlsberg Laboratorium on a visit to the laboratory.

Copenhagen.

HARCOURT, Augustus George Vernon. 1834 - 1919.

361

1 July 1874

A testimonial for HEA for the Chair at

47 Cadogan Place

the Yorkshire College of Science.

HARTLEY, Sir Harold. 1878 - 1972.

The following letters are to EFA, and are typewritten.

362

10 February 1942

Thanks for a letter which he has sent to

LMS Railway Company

Euston Station.

his father.

363

9 February 1943

Would like to have a talk with EFA [about

The same. (Temporary

address: Watford.)

Armstrong lecture ?]

2 March 1943

The same.

Suggests a title for the Armstrong lecture.

HASLETT, Caroline. Dame. d. 1957.

365

364

31 October 1945 The Electrical

To EFA. Regrets her inability to hear his

inaugural address. Typewritten.

Association for Women.

366

18 December 1945.

To Mrs. EFA. Letter of sympathy.

The same. Typewritten.

HAWORTH, Sir Walter Norman. 1883 - 1950.

368

25 November 1937

The University

To EFA. 'I am indeed highly pleased that

you and Heilbron succeeded in getting five

chemists into the Royal this year ... 'Typewritten. Edgbaston, Birmingham.

HEATH, Sir Henry Frank. 1863 - 1946.

369

3 April 1938

Brown Tiles

Guestling, Sussex.

To EFA. Thanks for proposal to put his name

370

7 November 1945

2 Morpeth Mansions

London S W 1.

forward as EFA's successor as chairman of the Council of the British Standards Institution.

To EFA. Ill health prevents his attendance at lecture on the Prince Consort. 'His great

contribution to the encouragement of science and the arts has never been properly recognised.'

Typewritten.

HENDRICK, Ellwood. 1861 - 1930.

372	10 October 1922 139 East 40th St., New York.	Unfavourable report of work of women in the Eastman research laboratory. 'Everything desirable except that they had butterfingers'. Comments on review of Loeb's book on colloids: invitation to the Spring meeting of the American Chemical Society. 3 ff. Typewritten.
373	4 May 1927 315 Havermeyer 118th St. and Broadway, New York.	His projected visit to South Africa with his widowed sister who needs a change from her fellow workers in the YWCA; appalling possibility of meeting fellow missionaries on the boat, etc.
374	14 January 1928 139 East 40th St., New York.	Congratulations on HEA's Golden Wedding; comments on Bancroft; HEA's remarks on men of science; his scheme for an Institute of Osmics.

HOPKINS, Sir Frederick Gowland. 1861 - 1947.

376	16 November 1939	To EFA. Thanks for reprint of one of HEA's
	71 Grange Road,	articles; belated condolences on his death;
	Cambridge.	'he wasawonderful man whose influence was
		most valuable in science'.

H

		most valuable in science'.
нитсні	INSON, C H	
381	25 November 1880 5 Claremont Terrace [Burton on Trent]	Description of an evening party at [Horace] Brown's home; his work at the maltings and the laboratory; chemical work, admiration of apparatus designed by Brown, thanks for the introduction to him, etc. 2 ff.
382	13 February 1881 The same.	Comments on cold weather and skating exploits; work on examination of phosphates is slow as there is no muffle furnace; details of costing of production in small model brewery adjoining the laboratory; comments on Kieldahl's paper, (last page missing).
383	5 March 1882 24 London Road Braintree.	Comments on differences in the work in large and small breweries; local tastes in beer which would have the effect on 'anyone suffering from alkalinity, would in these parts be instantly converted into a dangerous gasogene'; agricultural depression, etc. 2 ff.

ICKES, Harold L. 1874 - 1952.

384	19 February 1940	To EFA. Thanks for souvenirs of the
	The Secretary of the	centenary of penny postage: remarks on
	Interior, Washington.	the international situation: reports optimism
		of Ambassador Bullitt. Typewritten.

IRVINE, Sir James Colquhoun. 1877 - 1952.

385	14 March 1926 The University St. Andrews.	Confidential note on his nomination of EFA for the degree of LLD which has been successful. Postcard.
386	31 May 1939 The same.	To EFA. Remarks on 'Evans' candidature for the LLD. Typewritten.
387	4 January 1945 The same.	To EFA. Praise of 'Chemistry in the service of man'; anecdote of Nansen's remarks on the superior provisions supplied on English Arctic expeditions; muddled state of the sugar industry in the Caribbean.

JARMAN, George. See CITY AND GUILDS OF LONDON INSTITUTE, 189, above.

KEEBLE, Sir Frederick William. 1870 - 1952.

388	16 November 1940	To EFA. Thanks for appreciation of his
	Lydgate House	obituary notice of EFA. ' I hope the old man
	Postbridge, Devon.	gives a throaty chuckle when he reads it.

KNAPP, Karl.

389	5 April 1869 Brunswick.	In German. Invitation to visit him now that his brother and friends are leaving.
390	9 November 1869 Liebig Laboratory Munich.	In German. His work as Liebig's assistant; Liebig's and Pasteur's 'Nährungstheorie'; his own research on fermentation, etc. 2 ff.
391	15 May 1871 Schloss Maretsch Bozen, Tyrol.	In German. Had hoped to meet HEA in Leipzig; ill health had obliged him to give up post with Liebig and to work in kinder climate; enquiries about the cost of living in the Isle of Wight, etc.
392	[1871] n.d.	From EFA. In German. Draft of letter. Regrets at Knapp's ill health. His work at St. Bartholomew's and the London Institution,

etc. 3 ff.

LAPWORTH, Arthur. 1872 - 1941.

394 24 February 1910 30 Amherst Road Withington, Manchester. Pleasure at his election as FRS and thanks for the support of HEA.

LARMOR, Sir Joseph. 1857 - 1942.

394a 14 July 1907 St. John's College Cambridge. Discussion of the problems of mixed solutions.

LAWES, Sir John Bennet, Bt. 1814 - 1900.

395 - Ten letters to HEA, 7 July 1891 to 4 January 1897, from Rothamsted,
404 St. Albans, mostly on a projected lecture by HEA in the United States;
references to visits from the Director of the US Department of Agriculture, his own paper on wheat crops, etc. See Eyre, p. 126.

LE MAISTRE, Charles. d. 1953.

n.d. To EFA. Thanks for help as Chairman of 28 Victoria Street, SW1. Finance [British Standards Institution.]

406 9 May 1944 To EFA. Thanks for his support and apprec-Lea Gate House, Guildford. iation of EFA's work for the BSI.

LEVER, William Hesketh. 1st Viscount Leverhulme. 1851 - 1925. Correspondence with EFA.

18 December 1919 407 Congratulations on address as Chairman of Hotel Vancouver the Society of Chemical Industry; am in Vancouver, Canada. hearty accord with your views.' 408 7 January 1920 From EFA. Copy. Thanks for appreciation; comments on American and German competition in the soap industry. Typewritten. 409 27 January 1920 Discusses final plan for extensions at Widnes Cunard Steamship Co. and ' we want the last word in soaperies at [Off Plymouth.] Warrington' etc. 2 ff.

warrington etc. 2 ff.

19 July 1924 Is bonoured by the award of the Messel medal
Lever House, EC 4. from the Society of Chemical Industry. Typewritten.

LEVER, William Hulme. 2nd Viscount Leverhulme. 1888 - 1949.

411 15 May 1925 To EFA. Congratulations on appointment as Port Sunlight, Cheshire. Managing Director of BDC. Typewritten.

412 17 December 1945 To Mrs. EFA. Letter of sympathy. Thornton Manor, Wirral.

LIVEING, George Downing. 1827 - 1924.

414 -Four letters, 26 March to 7 April 1875, on HEA's application 417 for the Jacksonian Chair at Cambridge; advice on canvassing, testimonials, etc.; candidature of Dewar.

LOCKYER, Sir Norman Joseph. 1836 - 1920.

418 n.d. [Watermark 1893] Asks for a clear definition of applied sciences Westgate. referred to in a circular sent by HEA [probably connected with discussion over the scope of membership of the Royal Society].

LODGE,	Sir Oliver Joseph.	1851 - 1940.
419	17 March 1884 National Liberal Club, Trafalgar Square.	Has made up his differences with Ayrton; describes his correspondence with him about possible job [professorship of physics at the Central Institution] etc.
420	5 May 1884 20 Waverley Road, Liverpool.	Has declined the post because of the condition of annual reappointment.
421	7 May 1884 The same. See Eyre, pp. 84 - 85.	Outlines his correspondence with Ayrton and Magnus and states his previous ignorance of the conditions of appointment. Considers the terms quite improper ones 'and I might retort that you are doing your scientific brothers harm and lowering the dignity of your position by accepting office under such conditions'. 2 ff.
422	15 May 1884 University College, Liverpool.	Letter of recommendation for S.G. Rawson who would like to work with HEA.
423	29 May 1885 The same.	Will be delighted to received HEA's criticism of his EMF paper; discussion of plans for the British Association meeting.
424	6 July 1885 10 Penywern Road, South Kensington.	Regrets he will be unable to take part in the discussion on electrolysis until after publication of Clark's paper; the difficulties of joint research in a joint laboratory, 'a very delicate business'.
425	19 July 1885 University College, Liverpool.	Hopes to be able to do something for HEA 'will attend most to the thermal notations of electrochemic phenomena. It is a repulsive subject in some aspects, but it wants working through'

426	23 July 1885 The same.	Letter from J.W. Clark to HEA, enclosed in (425) above. Regrets he will not be able to contribute to discussion at the Aberdeen meeting.
427	2 September 1885 26 Waverley Road Liverpool.	Hopes to be able to publish some preliminary notes on his work which he will send to HEA; comments on electrolytic processes. 2 ff.
428	30 December 1885 University College Liverpool.	Wishes to know how much heat comes from the combination of various metals; plans for a holiday, various visitors, etc.
429	2 November 1886 Liverpool.	Enquires why HEA has not written since his visit to Berlin.
430	18 April 1887 University College Liverpool.	HEA's laziness in not attending the BA meeting at Cambridge; plans for further meetings.
431	11 May 1881 The same.	Short note. Agreement with HEA's protest re Arrhenius.
432	29 May 1890 2 Grove Park, Liverpool.	Brief note about the candidature of J.V Jones for fellowship of the Royal Society.
433	4 July 1902 Mariemont, Liverpool.	Thanks for congratulations [on knighthood.]
434	20 October 1912 The same.	Thanks for a friendly speech by HEA; comments on his point that a stimulus was necessary for change in organic compounds.
435	13 September 1913 The same.	Brief note; will not be visited by Bragg the following day.
435a	23 December 1935 Normanton House, Lake, Salisbury.	Brief note. 'I hear of you sometimes and marvel at your energies.' Typewritten.
LONDON	. The London Institution.	
436	21 December 1870 London Institution, Finsbury Circus.	From Thomas Piper, Hon. Secretary. The Board of Management of the Institution have appointed HEA as Professor of Chemistry.
436a		Printed notice for lecture by HEA on 'On the artificial formation of alcohols from their elements', 23 May 1872.

437	2 June 1973	Description of a sketch for a chemical laboratory to be erected at the London Institution. Signed by Arthur Charles [Booth?] Architect.
438	6 January 1882 77 Shirley Gardens Maida Vale.	From D. A. Louis. Reports on work in the laboratory; analysis of salt, etc.
439	14 January 1882 London Institution.	From T. Norris. Statement about the analyses in hand and stock of turpentine.
440	n.d. The same.	From D.A. Louis. Has been interviewed by Dr. [J.H.] Gilbert for possible job; his dislike of routine work, etc.
441	9 August 1883 The same.	From the Assistant Hon. Sec. Julian Hill. States the terms of HEA's employment.
442 /1	An historical account of the	London Institution, 1835. 68 p.

442/2 8 Journal of the London Institution, 1871-1880. Incomplete.

LONDON. The Leathersellers' Company.

444-Four letters, and other papers, January - February 1907, from the 449 Clerk to the Company, W. Arnold Hepburn, on HEA's election as Honorary Freeman of the Company.

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

Three brief notes: invitation to breakfast, etc. October 1900 to 453 June 1901.

McGOWAN, Harry Duncan. 1st Baron McGowan. 1874 - 1961.

457a 11 July 1928 To EFA. Asks EFA to come and see Nobel House, him the next day. Note by EFA ' to go at London, SW 1. once .£20,000 in lump sum.'

McLEOD, Herbert. 1841 - 1923.

458 10 July 1873 To W. Longman. Praise of HEA and on Cooper's Hill Staines. proofs of [Introduction to the study of Inorganic chemistry.]

See also WATSON, David. 580.

MACMILLAN AND COMPANY

459 30 April 1885 29-30 Bedford St. Confirmation of the proposal for HEA to write a laboratory textbook of inorganic chemistry. 'We were fully aware that your views on the subject differed considerably from those hitherto prevalent, but we were given to understand that they were very likely in the course of time to be accepted by the most intelligent teachers'.

MILLS. Edmund James.

1840 - 1921.

467 8 November 1872 12 Pemberton Terrace, St. James' Park. Invitation to 28 Park Crescent to 'put you up to a dodge of calibration which increased accuracy and saves time'.

468 16 November 1872 The same. Comments on Griess' "acid". Hopes that others will do research in 'my three forms of nitrobenzoic acid'; his dynamical interpretation of isomerism.

MINISTRY OF HOME SECURITY

469 13 April 1942

From L. Eardley Wilmot to the Chief Constable, Eastbourne. Note of introduction for EFA as Senior Gas Adviser. Typewritten.

MOND, Sir Alfred Moritz. 1st Baron Melchett. 1868 - 1930.

471 15 January 1914 55, Granville Park, Lewisham. Draft of letter to Sir Alfred from HEA.

Discussion of the terms of payment for the biography of Ludwig Mond which was projected and description of work involved.

MORTON, Sir James 1867 - 1945.

473 16 June 1927 Tuethur, Carlisle. To EFA. He has checked the letter of agreement which may be sent to Durand's; suggests that statements made by EFA to Sir Harry [McGowan?]'were not a little ungenerous towards me'; he has only had the goodwill of the industry at heart in his wish to regain freedom from 'incubus...of that unfortunate agreement between BDC and Durand's'.

PEDLER, Sir Alexander, 1849 - 1918.

479 30 May 1873 9 Middleton Row Calcutta.

Account of life in India 'there has been no provision whatever in the shape of laboratory made for me yet'; the rains; his voyage out, etc.

PERKIN, Sir William Henry. 1838 - 1907.

12 July 1873 481 Seymour Villa, Sudbury.

Comments on the preparation of

salicylic aldehyde.

482 11 March 1887 Suggests further specimens 'coal tar

products 'etc. for a lecture. The Chestnuts, Sudbury.

PERKIN, William Henry. 1860 - 1929.

483 2 December 1899 Fallowfield, Manchester.

Account of the work of his brother Arthur' it is Fairview, Wilbraham Road kind of you to interest yourself so much in my brother's candidature for the Royal Society. 12 ff.

484 10 December 1899 The same.

Is sending copies of his brother's papers; an idea for his BA address at the Bradford meeting.

485 7 May 1925 5 Charlbury Road To EFA. Congratulations on his appointment

at BDC.

Oxford.

PERRY, John. 1850 - 1920.

486 27 November 1899. Royal College of Science. Admiration of a letter from HEA.

QUINCKE, Georg Herman. 1834 - 1924.

495 17 October 1895

He idelberg.

In German. Asks HEA to forward the enclosed Italian postcard to EFA who would like to have the stamp for his collection; hopes EFA will visit him in Heidelberg.

RAMSAY, Sir William. 1852 - 1916.

496 n.d.

Expresses his disagreement with a theory of University College, London. [P.S.U.?] Pickering but does not wish to embark on a useless controversy.

ROBINS, Edward Cookworthy. See CITY AND GUILDS OF LONDON INSTITUTE, 189 - 193, above.

ROSCOE, Sir Henry Enfield. 1833 - 1915.

498	23 January 1871 Owens College Manchester.	Has mentioned HEA's name as a possible candidate for the chair at the India Engineering College.
499	23 October 1872 The same.	Further details of a vacancy in his own department; invitation to stay in Manchester.
500	27 October 1872 Victoria Park.	Asks for an acknowledgement of (499) above, which he fears has gone astray.
501	29 October 1872 The same.	Brief note. Regrets that HEA does not wish to apply for the post.
502	23 March 1875. The same.	Suggests that HEA should apply for the Jacksonian professorship and that he should write to Liveing.
503	29 March [1875] Manchester.	Brief note. Suggests that HEA calls on Dr. Campion of Queen's when at Cambridge.
504	8 April [1875] The same.	Suggests that HEA withdraws his application at Cambridge as Dewar has been nominated. "Without the support of the Committee you stand no chance whatever."

ROYAL SOCIETY

506	3 November 1911 Burlington House.	Letter from J. Larmor, Secretary stating tha HEA has been awarded the Davy Medal. Typewritten.
507	23 November 1911 The same.	Letter from Sir Archibald Geikie, President. Asks HEA as Davy Medallist to reply to the toast at the Society's anniversary dinner.
508	10 June 1926 The same.	Letter from Lord Rutherford, President. Congratulations on the 50th anniversary of HEA's election as Fellow of the Society. Typewritten.

ST. DUNSTAN'S EDUCATIONAL FOUNDATION

516	10 September 1890 St. Dunstan's College Catford.	Letter with enclosure from the Headmaster, C.M. Stuart on the award of an entrance scholarship for mathematics to EFA. 2 ff.
517	25 October 1937 31 Jewry Street, EC 3.	To EFA, from William Davison, on his appointment in place of his father as a Governor of the Foundation. Typewritten.

SCHACHT, G

521 - 526 Correspondence about a lecture given by HEA to the Bristol Pharmaceutical Society, etc. October 1872 - February 1874.

SOCIETY OF CHEMICAL INDUSTRY

531	9 July 1884	'Ye leather bottel.' Song at the third annual dinner of the Society. Printed poem.
532	16 February 1937 Central House, Fin sbury Square.	To EFA, from the General Secretary, H.J. Pooley. Sir Gilbert Morgan has been appointed as his successor as representative of the Society on the Governing Body of Imperial College. Typewritten.
500	Commonwealth to be to the DEA	and the Description of the Contrator Williams

Correspondence between EFA and the President of the Society, William Cullen, on the Armstrong Memorial Lecture, 1941-3. One packet.

STRUTT, Robert John. 4th Baron Rayleigh.

539	8 March 1937 69 Cadogan Square.	To EFA. Disconcerted to hear that he has not been reappointed as Governor at Imperial College, 'in my opinion most regrettable.'
		most regrettable.'

THOMPSON, Sir D'Arcy Wentworth, 1860 - 1948.

	,	
546	12 November 1945 The University, St. Andrews.	To EFA. Interested in his article on the Royal College of Chemistry; recollections of Thomas Rowney.
THORRE	Obs. The of the TM - 14 th 1000 1040	

THORPE, Sir Jocelyn Field. 1872 - 1940.

549	10 December 1930	To EFA. Details of the first statutory
	Imperial College.	meeting of the Association of
		Scientific and Technical Institutions.

TILDEN, Sir William Augustus. 1842 - 1926.

	,	
551	27 January 1874 Glenfart Cottage, Clifton Park Road, Clifton.	Suggestions for the improvement of Miller's textbook; importance of nomenclature, etc; need for a book on chemical philosophy; his own experience teaching boys has revealed the shortcomings of textbooks. 2 ff.
552	9 October 1879 Clifton College.	Asks if HEA will give him a testimonial and mentions other referees he has in mind.
553	8 July 1880 The same.	Intends to send a note to the 'Berichte' on rosin spirit; objects to the proprietary attitude of Germans to fields of research and in this case 'I think we may fairly shut up M. Kolbe.'
554	19 September 1880 36 Frederick Road Edgbaston, Birmingham.	Thanks for copy of Miller; need of an international conference on chemical nomenclature; progress on rosin spirit research . 2 ff.
555	28 November 1880 The same.	Regret at the death of HEA's sister; hopes to visit him in London; his research and the differences in the spirit they each use; mere college business prevents his return to research on the terpenes. 2ff.
556	7 March 1881 Sir Josiah Mason's Science College, Birmingham.	Now has an assistant and hopes to get on with something; asks if HEA can let him have some Russian turpentine, etc; asks if he is free for a walking holiday at Easter.
557	21 April 1881 The same.	His illness; some missing luggage of HEA's; 'dreadfully bothered' with candidates for the post at Nottingham, all asking for testimonials.
558	14 May 1881 36 Frederick Road, Edgbaston.	Griess had told him of the latest addition to HEA's family; Brown and the Nottingham chair; progress in his research, etc.
559	27 July 1881 Folkestone.	W. J. Nicol has been appointed as his assistant; hopes for an increased number of students in the coming term; foundation of the Central Institution; comments on construction of fume closets in the new building, etc; his future plans, etc. 2 ff.
560	23 October 1881 36 Frederick Road, Edgbaston.	Has been busy drawing up plans for an academic board. Suggests that Ramsay should be put up for election to the Royal Society; his research into isoprene. 2 ff.

561	25 December 1881 The same.	His wife's ill health has prevented them from visiting Armstrong; envy of their stay on the Riviera; hopes to carry on work on terpenes; some results with the india rubber hydrocarbon, etc. 2 ff.
562	24 March 1884 The same.	Has been invited to stand for the Central Institution chair; believes that HEA is the man for the job.
563	27 July 1885 Buxton.	Very surprised at the appointment made for the Physics chair at Leeds; will not be able to contribute very much to the discussion at Aberdeen [BA meeting?]
564	1 April 1889 77 Harborne Road Birmingham.	Will be glad to act as a steward at the Mendeleef dinner; comments on various candidates for the Royal Society, Mond, Brown, etc.
5 65	13 March 1892 The same.	Discussion of Dufton's thesis; thinks he should be allowed to add an introduction to amend it.
566	16 March 1892 The same.	Disagrees with HEA's opinion of Dufton's work and further discussion of the character of his work. Second page missing.
567	19 February 1893 The same.	Agreement with HEA's wording for a statement about the use of the letters 'FCS', with some modifications.
569	4 June 1893 Birmingham,	Sympathy with HEA's views [on Royal Society matters] Howorth's claims not strong; suggests HEA puts forward one or two young chemists and suggests Wynne and Kipping, and others. 2 ff.
570	6 March 1896 Royal College of Science.	Surprise at reading HEA's remarks on inversion etc. in the Proc. Chem. Soc., which he had previously told HEA he was working on; thinks that HEA might have deferred his speculations.

TIZARD, Sir Henry. 1885 - 1959.

571 22 February 1937 Imperial College.

Dismay at learning of the action of the Society of Chemical Industry. 'I shall try and get you on in another and more permanent way as soon as possible.' Typewritten.

TODD, Alexander Robertus. Baron Todd. 1907 -

572 25 August 1938
Lister Institute of
Preventive Medicine.

To EFA. Thanks for congratulations on appointment: regret at death of 'Kenneth' [Armstrong.]

WARINGTON, R

574 3 May 1888 Chemical Society Burlington House. Note on proposed title for a paper to be read at the June meeting.

575 9 November 1888 Harpenden.

Suggests names of suitable Fellows for Presidency of the Society, such as Odling. Would be willing to show relevant papers of his father's on the foundation of the Society, at the Jubilee celebrations.

576 8 April 1889 The same. Gives a list of some of his papers; 'I cannot work either with or under Dr. Gilbert after his conduct towards me'; asks the Managing Committee for leave to continue working in the laboratory under the present terms.

577 16 June 1890 The same. Suggestions for the celebration of the Jubilee of the Chemical Society; sketch for a history.

578 19 December 1891 The same. Discussion of possible portraits for the Jubilee album, etc.

WARREN, Sir Thomas Herbert. 1853 - 1930.

579 26 May 1925 Magdalen College Oxford. To EFA. Pleasure at meeting; 'you have the independence of mind of your father'. Comment on the intellectual and moral balance of the English speaking races. Typewritten.

WATSON, David. 1846 - 1899.

580 29 March 1871 The College, Chester. Pleasure at the appointment of McLeod; discussion of his research on the determination of oxygen and hydrogen. 2 ff.

WEST, Arthur G B

581 22 October 1926 St. Dunstan in the East Great Tower Street, EC3 Covering letter for a copy of a lecture delivered at St. Dunstan's College, Catford, on the history of education. 20 p.

WILLIAMSON, Alexander William 1824 - 1904.

584 8 November 1872 University College, London. Sends details of an appointment which he has received from Roscoe which may interest HEA.

WILSON, Arnold T

585,	16 January 1930
586	Britannic House
	E.C.2.

Covering letter, for a letter from his father, J.M. Wilson, commenting on a paper by HEA' I hail him as one of the prophets of the new age'.

WRIGHT, Charles Romley Alder.

588 18 November 1870 Rector's Cottage, Washington, Co. Durham. Asks if HEA would like to join him in researches on codeia, as he proposed to continue the investigations he had begun with Dr. Mathiessen; account of his future line of research.

WYNNE, William Palmer. 1861 - 1950.

590	12 June 1904
	Chemical Society.

Hopes HEA will reconsider his decision and allow the Society to publish his Frankland lecture, and not prevent the Society 'from doing that exceptional honour to Frankland's memory which the Memorial lecture was intended to express'.

591 31 July 1904 9 Selwood Place, S.W. Thanks for congratulations on Sheffield appointment; remarks on the keen interest of the Council there on the promotion of education, etc. 2 ff.

592 9 May 1925 17 Taptonville Road, Sheffield. To EFA. Best wishes for his appointment with BDC.

593 31 May 1936 2 Belvoir Terrace, Cambridge. Thanks for Golden Jubilee telegram celebrating beginning of his research with HEA; detailed account of his naphthalene research; difficulties with chlorination, with comment on this by HEA at the end of the letter.

594 25 August 1940 1 Cranmer Road, Cambridge. To EFA. Returns a letter about the work of HEA at St. Bartholomew's Hospital.

595	2 February 1941 The same.	To EFA. Regrets that a cold prevents him from attending the Armstrong Memorial Lecture.
596	31 August 1941 The same. See Eyre, p. 109.	To EFA. The difficulties of preparation of adequate quantities of 'starting material' for research on 'trichloros'; comments on the change in attitude of German chemists in supplying material to HEA during 1887 - 95; helpful work of Miss Turner, etc.
597	26 March 1943 The same.	To EFA. His continued work on naphthalene derivatives; quotes from a letter from [Sir M.] Forster about the Bangalore Research Institute; covets the honour of being elected a Fellow of Imperial College.
598	5 April 1943 69 Barkston Gardens S W 5.	From EFA. His admiration of Wynne's strong handwriting; Lord Rayleigh now arranges about election of Fellows, etc. Carbon copy of typescript.

D PRINTED MATERIAL

Professor Armstrong and his son both wrote many scientific and non-scientific papers. In particular, Professor Armstrong wrote many papers of a general character and interest in the years of his retirement. The material presented by Miss Armstrong included the following printed books and papers:

Henry Edward Armstrong

- Introduction to the study of organic chemistry, London, Longmans, 1874. Autographed.
- The teaching of scientific method and other papers on education. 2nd ed. London, Macmillan, 1925. Author's copy. Two postcards from Sir Philip Magnus, letters from the publisher, etc., are pasted in.
- 3 Essays on the art and principles of chemistry, London, Benn, 1927. Letters from Sir Joseph Larmor, Professor H.B. Baker, the publishers, etc., are pasted in.
- 4 8 Five bound volumes of scientific and non-scientific papers including one of 'Memorial Lectures'.
- 6 Royal Society papers; unbound.
- 7 Other papers, unbound.

Edward Frankland Armstrong

- 1 3 Three bound volumes of papers, including one on 'Enzyme action'.
- 4 Royal Society and other papers. One packet.
 - See 'Obituary Notices of Fellows of the Royal Society' vol. 5, no. 16, for a bibliography.

E FAMILY NOTEBOOKS

Professor Armstrong arranged a series of scientific experiments with three of his children to demonstrate the heuristic method of investigation and teaching, 1898. The children kept notebooks of their work, illustrated with diagrams and photographs.

- 1,2 Harold Armstrong. Two notebooks. 194, 198 pp.
- 3 James Armstrong. Notebook. 197p.
- 4,5 Nora Armstrong. Two notebooks, 197, 191 pp.

See W.H. Brock; Prologue to heurism in 'The changing curriculum', History of Education Society, Methuen, 1971.

