Report on the papers of

HUMPHREY THOMAS PLEDGE, C.B.E. (1903 - 1960)

deposited in the Library of the University of Sussex

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Committee on Scientific and Technological Records

CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

Papers of

HUMPHREY THOMAS PLEDGE, C.B.E.

(1903 - 1960)

Listed by Jeannine Alton Harriot Weiskittel

Description of the collection

The collection was received from Mrs. Ruth Pledge. It consists of manuscript notes, drafts and working papers; there is a small amount of correspondence.

The papers had been stored for 10 years following Pledge's death and many are marked by rust and corroded metal.

Pledge spent almost the whole of his working life in the Science Museum Library, as Assistant Keeper (1927 - 45) and Keeper (1945 - 60), and is best known for his book Science since 1500, London H.M.S.O., 1939, 2nd.ed.1966.

Some of the notes in the collection, written on grey paper, were probably assembled for this book; but it is clear that throughout his life Pledge had been accumulating material for an ambitious project which would be both an encyclopedia of world history and an interpretation and synthesis of knowledge. Work on this became his main concern from (c) 1940 until his death in 1960, as is shown by the dating of his notes. His wide range of reading and thinking produced copious notes, which he re-arranged and reallocated according to an increasingly elaborate system, while the many plans and charts he devised (see Items 27 - 36) show the scale of his intention and the problems he encountered.

An account of the origin and development of his ideas is contained in Section I, Biographical Material, Items 1 - 5. The 'intellectual autobiography' addressed to Dr. K.P.Oakley in 1955 (Item1) discusses the importance for him of the history of trade-routes, maps and charts; formal properties, sets, number and dimension; chronology and synchrony; 'degrees of acquaintance'; personalities such as Hilaire Belloc; literary forms such as the Maxim. These ideas or interests can be traced in the notes and working papers. Item 4 contains Pledge's own explanation of his methods of work, his use of different coloured papers, inks or pencils, signs and abbreviations amounting to a private language, and his own interpretation of alphabetical symbols. He admits that the esoteric nature of his system, to which puns, numbers and etymologies (real or fanciful) contributed, as well as his constant revision of his categories and plans, made the notes difficult to follow, and that some were too fragmentary to convey meaning.

Some sections of the work had reached draft stage, though still subject to extensive revision; they appear as Items 37 - 39,91,92. Some, though

left in note-form, could be grouped under ascertainable subject-headings. A large number were clipped or pinned in clusters or irregular shapes; they have been retained as Items 101 - 105, although they cannot be assigned to a definite topic. Others were received as loose jottings and may have been displaced or disordered after Pledge's death; no attempt has been made to regroup them.

Summary of Pledge's career

ъ. 1903

1916 - 21 Educated at Tonbridge School

1921 - 25 Trinity College, Cambridge (Senior Science Exhibitioner)
Natural Sciences Tripos, Class I

1925 - 26 Assistant Master, Wrekin School

1927 - 45 Assistant Keeper, Science Museum Library, South Kensington

1934 Married Ruth Brown

1939 Science since 1500, London H.M.S.O.

1945 - 60 Keeper, Science Museum Library

1960 C.B.E.

Contents of the handlist

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Handlist

I. Biographical material

1. 'An intellectual autobiography'; essay addressed to Kenneth Oakley, 1955 1955. 63 pp. Contains some explanation of the growth of Pledge's ideas.

Obituary notice of Pledge by A.C. Townsend, Library Association Record, 63 no.4 April 1961.

- 2. Letter dated 2/9/39, inscribed 'Open only if I become a casualty.' 1939
- 3. 'Autobiogr.' Bundle of notes, memos and record of work done. 1940 41

 Draft of autobiographical note.
- 4. MS inscribed 'For K.P.Oakley, should he wish to look over my notes.'
 Contains explanation of ideas, methods of work, numbers, colours etc.
 used in notes, signs and abbreviations. With specimen notes and Pledge's interpretation of alphabetical symbols.
- 5. Notes dated at various times in 1960

1960

II.Bibliographies

- 6. Brown loose-leaf book, with numbered list of books read.
- 7. Loose pages of notes with numbered list of books read.

1944

III. Articles, addresses, essays.

- 8. 'Soap Men. A Study in Edwardian Politics.'
 2. corrected MSS, with additional notes.
 Shorter drafts and notes, mainly on aspects of European history in 19th and 20th centuries.
 Letter and press cutting from John Plant Harthan 1959
- 9. 'Biology and Topology.'

1935

Typescript and Ms of essay Letter of rejection from Editor, NATURE Draft letter from Pledge (probably to Sir Julian Huxley) on the mathematical foundations of biology. 1935

10. 'Symbolism as a limiting factor in the history of science.'
Published in Science Medicine and History, Essays...written in
honour of Charles Singer, C.U.F., 1953, Vol II, 450 - 460.

Printed text (2 copies)
2 drafts (1 defective), typescript with Ms corrections
Letters from M.S.Bartlett (n.d.) and A.Prag (1939) with comments
on paper.
Copy of article by A.Prag, on James Gregory, with accompanying letter. 1938
Letter from E.Ashworth Underwood (editor) re Singer festschrift. 1946

11. Essays. Typescript, some with Ms additions and corrections.

Beauty of Growth
Sense of Character
'The Office-worker's Guide to Life. Idle Minutes of a
Permanent Official.' 2 copies
'Chapter XI. The Classical Electron Theory, and Appendix I & II'
(unidentified Ms. not part of 'Science since 1500')

12. Essays. Typescript, some with Ms.additions and corrections.

The Quest Non-functional Beauty The Maxim (with additional Ms.notes)
Beauty in Machinery (with additional Ms.notes)

13. 'Under Forties. A Proposal on the Population Crisis.'
Book I. 6 chapters (complete)
Book II Several chapters unnumbered and incomplete.

IV. MSS drafts and synopses.

- 14. 3 papers on algebra. On 'Inconsistents' (1 paper) and 'Cubic 1919 20 Equations' (2 papers).
- 'Analysis of proposed book. "Sources of Scientific and Technical Information" by H.T.Pledge, B.A., Sometime Senior Exhibitioner, Trinity College, Cambridge.'
- 16. 'The Scientist's weekend book and Laboratory Companion.' Synopsis and notes.
- 17. 'History of Technics and Modern Problems. Provisional Synopsis.'
 With later notes and page of typescript comments.
- 18. Ms. draft, on social effects of technological advance; see also Items 20 and 120.
- 19. Notes, 'Research, Both subjects and admin.' Includes 'Synopsis of proposed pamphlet or short book.'
 1948,1954
- 20. Draft for work on Social and political effects of technological advances; draft letter to Raymond Postgate accepting editorial criticism of the proposed work. See also Items 18 and 120 1932

V. Drafts and notes for Maxims.

- 21 'Notes and Maxims by H.T.Pledge.' 88p. Unpublished typescript with Ms corrections.
- 22. Bundle of loose notes of maxims.
- 23. Black loose-leaf notebook of maxims and quotations.
- 24. Black notebook; inside, 'H.T. Pledge. His anthology.'
- 25. Diary, 1955; inside 'Common Place Book HTP.'
- 26. Black notebook; inside, 'H.T. Pledge. His Marx.'

VI Working papers and notes.

Most of these are related to Pledge's projected work on a synthesis of knowledge. His aims and methods of work are briefly discussed in the description of the collection, and outlined in Items 1,2, and 4.

A fuller understanding of the complexity of the project, and his attempts to codify and organise it, can be gathered from Items 27 - 36, and 90 - 92, some of which are based on notes originally compiled 1934 - 38 for Science since 1500, subsequently augmented, modified and redistributed. Inverted commas indicate Pledge's own words.

- 27. Draft account of projected work, with note dated 10/12/59 1959
- 28. Plans, charts and tables; classification of subject-matter. (last note dated 1/10/60)
- 29. Small black loose-leaf notebook, with explanation of abbreviations and conventions, and plan of work.

 1941
- 30. Bundle of notes headed 'Lists of crucial qu's & stages reached chiefly '35.' (with many annotations and additions.)
- 31. 4 bundles of notes indicating methods of work and development of ideas.
- 32. Envelope marked 'H.T.P.'s Notes . Samples of his thoughts in last year. He found that even punning had deep significance. K(enneth)P.O(akley). 17.XI.72.'
- 33. Envelope bearing multiple dates 1942 57, indicating Pledge's continuous reorganising of his notes.
- 34. Bundle of notes on Symbols and Systems.
- 35. Bundle of notes and ideas on formal properties, aspect and identity, classification, measurement, sets, dimension etc.
- 36. Envelope marked 'Amusements 30/9/46.' Mathematical problems and puzzles on sets, patterns, mosaics etc.
- 37 39 Partly completed Ms. drafts of chapters or sections, many with accompanying additional notes and bibliographies; no titles given; variously dated 1946 to 1959.

 3 folders.
- 40 100 Working papers and notes, identified by subject-matter. Pledge's ordering of bundles of notes has been retained.
- 40 42. Geography, maps, traderoutes etc. notes, maps, presscuttings. 3 folders.
- 43. Geography and Ecology
- 44 48. Mathematics, theory of number, information theory etc.
- 44. Charts, diagrams, notes
- 45. Working notes on information theory; letter from R.A.Fairthorne 1932
- 46. Working notes on Ergodic theory; 2 letters from M.S.Bartlett 1946
- 47. Draft chapters on methods of mathematical notation, models of classification,

reference systems etc.

- 48. Misc.notes on history and methods of mathematics. 3 folders.
- 49 52. <u>Statistics</u>, with special reference to demography and economics. Notes, press-cuttings, tables etc. 4 folders.
- 53. Agriculture, trade and population.
 Notes, press-cuttings, etc.
- 54 55. <u>History</u>
 Notes, bibliographies
 2 folders.
- 56. History of Religion.
- 57. Religion and Metaphysics.
- 58. Religion, Magic and Medicine.
- 59. Medicine and History of Medicine.
- 60,61. Biochemistry and Cell Structure.
- 62. Chemistry; includes short Ms. 'My enzyme idea'.
- 63. 'Inorg. Chem.'
- 64. 'Zool.'
- 65. 'Misc. Bot. Zool.' on outside of bundle. Notes inside deal with geology, agricultural economics, and the theory of 3 dimensional space.
- 66. Botany.
- 67. Biology.
- 68. Physics.
- 69. Meteorology.
- 70. Military History; mainly of 1914 18 World War.
- 71. Human and Animal Societies.
- 72. Animal Social Structures.
- 73,74. History of Economics, Trade, Banking etc.
- 75. Notes on the theory of Progress.
- 76. History of Industrial Organisation.
- 77 79. History of Technology. 3 folders.
- 80. Etymology and word derivations; mainly English and French.

- 81. Law of Contract, Fraud and Misrepresentation.
- 82. Taste, Fashion, Amusements, Aesthetics. includes short Ms. 'Another kind of Realism.'
- 83. Misc.notes on biographies of historical figures, family standing of scientists, esp. on Descartes.

 Charts on mutual influences and interrelationships.
- 84. Misc. biographical notes on Hilaire Belloc.
- 85. Bundles of notes marked 'USED'.
- 86. 2 bundles of bibliographical and reference notes.
- 87. Unattributed notes.
- 88. Caste and Social Structure. Extended Ms. draft.
- 89. 'Philosophical i.e. QU's unanswered'; misc. notes.
- 90. 'Structures of thought
 Theory of Modes
 Puzzles i.e. Trials
 Formulation of Problems ' Misc. notes.
- 91,92. Longer Ms drafts for sections of projected work, many with headings, annotations and additional notes. Topics include:
- 91 Tabu

 After life
 Castes and parasitism
 Domestication
 Arthropods
 Omens
 Augury
 Dreams and trances
 Priests and prophets
 Plant luck
 Taste
 Burgundy and Rhineland
- 92. Mess, Mass, Matrix
 Beacons
 War and Armies
 Travel and landmarks
 Patterns of numbers
 Numbers
 Maps
 History and Science
 Games; 2 sections
 Nature
 Symbols
- 93,94. Notes and charts on Chronology and Synchrony 2 folders.
- 95. Misc. papers re science since 1500; page of corrected draft; notes on 1947 reprint etc.

96.	Misc. press-cuttings, articles from journals etc., some annotated by Pledge. Note on 'Stellar Constitution and Evolution' in another hand.	
97•	Photocopies of letters, articles etc. re Benjamin Jesty, precursor of Jenner's work on vaccination.	1949 - 54
98.	Misc cuttings, articles, notes on Time	
99.	" " " St. Michael's Mounts	
100.	" " " Fractions and Musical Intervals, with letter from C.T.L.Griffith. 1941	
101 -	- 105. Shorter notes, subject-matter only partly identifiable. Pledge's ordering of the notes has been retained. 5 boxes.	
106.	Envelopes of notes dated by Pledge 1941 1 box. 12 envelopes	1941
107.	Envelopes of notes dated by Pledge 1940 - 44 1 box. 12 envelopes.	1940 - 44
108.	Envelopes of notes marked 'INF.' dated 1941 - 42 1 box 11 envelopes.	1941 - 42
109.	Envelopes of notes marked 'INF.' dated 1942 - 60	1942 - 60
	13 envelopes 1 Envelope marked 'ABEYANCE' dated 1945 1 box.	1945
110 -	- 115. Envelopes of notes marked 'DUP.' and dated by Pledge.	
110	6 boxes. 12 envelopes	1941 - 51
111.	20 envelopes	1942 - 44
112.	35 envelopes	1942 - 45
113.	30 envelopes	1946 - 50
114.	20 envelopes	1951- 54
115.	11 envelopes 1 envelope	1956 - 60 n.d.
116 -	- 119. Unsorted fragmentary notes. These had been dispersed after Pledge's death and cannot be	

VII Correspondence

In chronological order.

4 boxes.

from Professor W.H.McCrea; comments on mathematical physics sections of Science since 1500, with Pledge's annotations

regrouped or identified with certainty.

These had been dispersed after Pledge's death and cannot be

with	Raymond Postgate (3 letters) re proposed article by Pledge on s and political effects of technological change, for Postgate's	
	publication FACT; with later notes by Pledge. see also 18 and 2	0. 1938
"	A. Wheen re reference for colleague Ceci re foreign sales of Science since 1500	(c)1939 1940
from "" "" "" "" "" "" "" "" "" "" "" "" ""	P.C.P.Huysers. Congratulations on Science since 1500 C.M.Parkinson W.A.Osborne E.J.Moulton. On Science since 1500 George Sarton G. N. Clark Derek Justin Schove. On Schove's collection of materials for history of science, especially maps, chronologies, statistics, char Hal Gray Warren R.Dawson. On paranomasia in Egyptian texts I. Bernard Cohen. Congratulations on Science since 1500 Walter Pagel (2 letters) on Science since 1500 Harvey W.Haines (2 letters) " " " " R.A.Fairthorne. On mathematical typescript. W.F.Floyd. On Electricity in Medicine R.J.Spilsbury. On Genetics and Evolution T.J.Fletcher. On mathematical games. W.M.Dumlop Frank P.Chambers. Comments on Ms.submitted by Pledge. George E.Hyde. On burnet moths. R.Lawton. On Leeds and Bradford textile industry Jerome Ravetz J.H.P.Pafford John Plant Harthan unidentified	1944 1946 1946 1946 1947 1947 1949 1955 1956 1957 1957 1958 1959 1960 1960
"	George A.Arthurson. On building and invention during the Industrial Revolution.	n.d.
"	Joseph Needham; review of 'Religious Motives in the Medical Biology of the 17th.Century' (c) 1935.	n.d.