

The London Institution 1805-1933

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The London Institution, 1805-1933.

This study is an account and analysis of the activities and fortunes of the London Institution from its foundation in 1805 to its final closure in 1933.

The Institution, modelled on the Royal Institution, began in 1805 with over £80,000 and a proprietary mainly engaged in trade or commerce. Premises were leased in Old Jewry and later, in 1811, premises were purchased in King's Arms Yard but were found to be unsuitable. Eventually, the managers decided to have a mansion specially built in Finsbury Circus. This was designed by William Brooks, erected by Thomas Cubitt and opened in 1819.

Before 1819 no lectures were given nor laboratory work carried out as no suitable accommodation was available. However, a large collection of books was acquired which formed the basis of the Institution's library. Much later, a popular circulating library was added.

In 1819, the theatre was opened and lectures commenced. At first, there were courses of lectures intended to give instruction in various subjects but later they were replaced by single lectures as entertainment.

It was not until 1841 that W.R.Grove was appointed to work in the laboratory. Scientific work had a patchy career at the Institution before being discontinued in 1884 after H.E.Armstrong resigned.

By the 1890s, large sums of money had been spent on repairing the building and the Institution was heavily mortgaged. The managers sought solutions to the problem but after the Royal Commission on University Education in London reported in 1912, the premises were taken over for the School of Oriental Studies. Some proprietors and subscribers remained as continuing members but the Institution closed in 1933 when the School moved to Bloomsbury.

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ERRATA.

Chapter 2.

p.37.line 3. ... of printing . . .

line 14. . . and the practice. .

page 39. line 4. . . the managers . . .

page 45. line 17 . . duties that they had to perform . .

Chapter 3.

page 67. line 14 . . and library . .

page 78. line 18. . . but had been unsuccessful.

Chapter 4.

page 86. line 8. . . and was . .

page 88. line 6. . . he was appointed Regius Professor of Greek . .

page 97. line 15. . . dismiss him from their employment.

page 102. line 8. . . "in consideration of . .

line 17 . . and a set of rooms . .

page 106. line 20. . . had been unsuccessful . .

page 108. line 5. In February 1882, . .

page 115. note 45. . . was run by Peter Rolandi . .

page 117. line 20. In addition, to overcome . .

page 121. line 2. . . Act of Parliament. .

Chapter 5.

page 125. line 2. . . Charles Butler spoke . .

page 126. line 10. (presumably from the Institution's collection)

page 128. line 12. . . lectures were more . .

page 131. note 32. line 7. The substance of them forms. . .

Chapter 6.

page 154. line 16. . . of the apparatus . .

page 163. line 19. . . although no definite mention . .

page 176. line 1. . . accept a gift of money . .

Introduction

The London Institution has been largely ignored by historians. Since 1874, when Bernard Becker¹ visited it and passed uncomplimentary remarks about the Institution in general and its lectures in particular, it has sunk into almost total obscurity², even though it was some years before Becker's wish that it might move "into the superior stratum of dead and gone institutions"³, was realised.

Despite Becker's aspersions, the Institution does not seem to deserve this neglect. It was in existence for nearly 130 years, for most of which it was housed in an impressive building on the north side of Finsbury Circus. This building alone would merit more attention than it has hitherto received as it was Thomas Cubitt's first major contract and therefore an important point in his career⁴. The pattern of employing craftsmen on site that he adopted during the construction of the building was to set the pattern that he adopted in subsequent contracts.

The Institution was started in 1805, at a period when science was seen as an important study, not only as natural theology but also as closely linked to the production of wealth.

It is not unfair to describe the London Institution as an offshoot of the Royal Institution, although their paths soon diverged. Nevertheless, the London Institution seems to have kept an eye on the Royal Institution and adopted and adapted some of its successful features, most notably the soirees and lecture programmes⁵. From a study of the Royal Institution

1. Bernard H. Becker, Scientific London p.189 - 200.

2. Recent studies of the Institution are:

N. J. Hayes, 'Science in the City: the London Institution, 1819-1840'. British Journal for the History of Science, VII July 1974 p.146-162.

K. A. Manley, 'E. B. Nicholson and the London Institution', Journal of Librarianship, January 1973, p.52-57.

3. Becker, p.90.

4. Hermione Hobhouse, Thomas Cubitt, Master Builder.

5. See p.125, 136.

managers' minutes and visitors' reports, it does not appear that this institution felt any need to copy its imitator.

Although by comparison with the Royal Institution, the London Institution's career tends to look rather erratic, it nevertheless had lectures that were well attended⁶ and its library, which included some collectors' items, was notable⁷. Its newspaper and pamphlet rooms were popular and seem to have served as a meeting place for those engaged in business and commerce in the City of London.

These things being so, the Institution probably played an important part in the activities of quite a large number of people and it is worth investigating the Institution and its affairs to try to assess how successful it was in achieving what its founders set out to do.

In collecting material for this thesis, I was particularly dependant upon the kindness and patience of the librarian and staff of the Guildhall Library, the librarians and archivists of the Royal Institution and the School of Oriental and African Studies, the librarians of the Bishopsgate Institute and Sheffield Polytechnic, and the archivist of the Mercers' Company. The librarians of King's College, University College and London University kindly provided information on the dispersal of the Institution's library, as did the archivist of the Guildhall Library and the Superintendent of the Bibliographical Information Service of the British Museum, whilst information on the transfer of the blue-books was given by the Superintendent of Readers' Services of the British Library of Political and Economic Science.

6. See p. 128, 134.

7. See p.86.

While I was organising the material I had collected into a coherent form, I was particularly dependent on the advice and guidance of Dr. W. H. Brook, who helped me to gain insight into an important aspect of the history of science. I am also grateful to Mr. John Salt and Mr. David Jacques, with whom I discussed my work as it progressed and who make me aware of some of the more general historical issues.

CHAPTER 1

The Origins and Background of the Institution

To the historian, it is evident that changes in Britain had accelerated from the 1790's and that by 1800 they had reached the stage where they must have been felt over a wide area. Society was undergoing a transformation. Although, on the surface, politics did not appear to have changed very much as the hold of the landed, ruling classes had not yet been broken, nevertheless a new social group was gaining strength. Merchants and manufacturers were becoming increasingly wealthy and were very much aware of the important part that they were playing in the war against France.

During the last twenty years or so of the eighteenth century, transport improved, overseas trade expanded, and although labour was in short supply, labour saving inventions were encouraged by the money which had become readily available. The outbreak of war had brought many changes. Manufacturers faced a loss of markets. Food prices rose, leading to wage demands and these in turn stimulated increased efficiency in production. War-time changes were met with a resourcefulness that might have been more cautiously applied had times not been so difficult.

The war increased the demand for iron and steel, cut down supplies from abroad and caused a rapid increase in price. This meant that, not only was it necessary to increase home production but also to improve its quality to meet the more exacting demands of customers. These aims were so dramatically achieved that the ironmasters' problem was over-production rather than the inability to meet demand.

However, the home market for iron was expanding as new uses for it were introduced. The steam engine, which depended upon a ready supply of good quality metal, brought about an economic revolution. The iron industry itself became mechanised and other important industries, such as cotton and wool manufacturing were affected by the increased use of machinery. Industries

such as glass-making, pottery and tanning did not change radically in their production methods but benefited from the expansion of others.

As production increased, commerce expanded, more shipping was needed and docks were developed. Inland communications were improved and canal mileage increased sharply. This growth in commerce and manufacturing activities brought fortunes to those who invested in them and so increased the numbers and wealth of those involved.

An important effect of industrial change was the realisation of the importance of applied science and an increased interest in it. Popular works on science had a ready sale and itinerant lecturers gave lectures and demonstrations on science. Scientific societies and discussion groups were formed, often meeting in coffee houses. These were informal in their organisation, tended to be isolated from one another and were generally short-lived.¹

Ideas of utility and progress formed an important part of people's thinking. In 1754, the Society of Arts² was founded "for the encouragement of Arts, Manufactures and Commerce"³, and proposed to carry out these aims by giving rewards in the form of premiums and prizes for solutions to specified practical problems. The Society built premises for itself in the Strand and later in the Adelphi, and also assembled a library. Both these features may have influenced the thinking of later organisations such as the Royal Institution and the London Institution.

Many of the societies formed during the latter part of the eighteenth century and the first two or three decades of the nineteenth century were concerned with spreading interest in literature and other cultural pursuits as well as science. The Manchester Literary and Philosophical Society,

1. See R. E. Schofield, *The Lunar Society of Birmingham*, p.3-16; also A. E. Musson and Eric Robinson, 'Science and Industry in the Late Eighteenth Century' in *Science and Technology in the Industrial Revolution*, p.87-189.

2. See also p.15, p.201 and p.211a.

3. See D. Hudson and K. W. Luckhurst, *The Royal Society of Arts 1754-1954* p.7.

founded in 1781, formed the pattern for many similar bodies. Literary and philosophical societies were formed in other provincial centers such as Hull (1822), Liverpool (1812), and Rochdale (1833), as well as similar societies under other names, as, for example, the Royal Literary and Scientific Institute at Bath (1825) and the Ipswich Philosophical Society (1822).

Similar societies were formed in London: the Surrey Institution⁴ in Blackfriars, the Philomathic Institute (1807)⁵, the Russell Institution (1808)⁶ in Great Coran Street and the Adelaide Gallery of Practical Science (1837)⁷ in Adelaide Street, West Strand. Each of these societies were interested in science and literature but the emphasis changed from one institution to another.

4. The Surrey Institution started in 1808 according to most sources, but the section on Frederick Accum in the DNB states that he was lecturing at the Surrey Institution in 1803. Thomas Piper (secretary of the LI) in 1872, in a paper on the LI's history, suggests that the Surrey Institution was active before the LI. "At the time of its (the LI's) foundation, there were but two such in existence in the metropolis - the Royal which preceded it by about six years only, and the Surrey. Soon after the starting of the LI, the on dit was that the London had money but lacked wit, the Royal wit but lacked money; and the Surrey had neither the one nor the other". (Journal of the LI, Jan. 1872). The SI collapsed in 1823. (Gent Mag. 93, 1823 pt.i, p.353, 451; pt.ii, p.527).
5. The Philomathic Institute possessed a library both for reference and circulation and, unlike most similar societies, held debates and discussions for its members. (The Philomathic Journal, July 1824).
6. The Russell Institution aimed to form a library for reference and circulation, to have a reading room and to hold lectures on literary and scientific subjects. It was housed in the Russell Rooms which had been built in 1799 by James Burton. The Institution appears to have survived until 1897, after which it disappears from the London Directories. E.W. Brayley, sen. was librarian, 1825-1954. (A Catalogue of the Library of the Russell Institution, 1854, foreword by E.W. Brayley).
7. Known also as the National Gallery of Practical Science and the Royal Gallery, it promoted interest in science by establishing a reading room and holding evening meetings when papers were read. Its main function was to hold exhibitions of scientific apparatus and inventions in engineering. More general cultural activities took over and evening meetings eventually took the form first of concerts and finally of dances. In 1852 the building was converted into a marionette theatre and by the end of the century had become refreshment rooms. (M.B. Wheatley, London Past and Present, E.C. Curwen, Journal of Gideon Mantell).



Plate I. The London Institution, Finsbury Circus.

The Royal Institution in Albemarle Street, founded in 1799, had a much wider purpose at the start. Not only were its own members to be instructed in scientific and technical knowledge, but also the application of science to arts and manufactures was to be taught to mechanics, a venture which had to be abandoned because it was thought by many to be politically dangerous. Thereafter, the best known of the Royal Institution's activities were the lecture courses and the scientific work carried out in its laboratory, which is what the managers of the London Institution wished to emulate, with the addition of a library,⁸ when that institution was established in 1805.

Shapin⁹, Thackray¹⁰, and Berman¹¹ have argued in their studies of some of these institutions that at this period there were considerable changes in attitude towards science as a cultural activity. As has been said above¹², the Industrial Revolution brought about not only economic changes but cultural ones as well and a new social group, consisting mainly of merchants and manufacturers was increasing in size and power, although often unable to vote in parliamentary elections. They therefore sought a social identity and for some of them the scientific discussion groups and, later, the scientific and literary societies formed part of this quest.

The Industrial Revolution also produced a marked revival of the Baconian definition of science. Inventions, improvements and industrial applications depended on science and the word 'science' had a wide range of meanings. It generally meant a combination of applied science and technology, or inventiveness, and was thought of as being closely linked to the production of wealth

8. The Royal Institution library was not established until 1803. It relied mainly on donations, although some important scientific works were purchased. It was never as lavish as the LI library.

9. Steven Shapin, "The Pottery Philosophical Society, 1819-1935: an Examination of the Cultural Uses of Provincial Science." Science Studies, 2 (1972), p.311-336.

10. Arnold Thackray, "Natural Knowledge in a Cultural Context: the Manchester Model". The American Historical Review. Vol 79, No.3., June 1974, p.672-709.

11. Morris Berman, "The Early Years of the Royal Institution, 1799-1810: a Re-evaluation." Science Studies, 2 (1972), p.205-240.
Morris Berman, Social Change and Scientific Organisation. (Hereafter, Berman, Thesis).

12. See p.1, 2.

rather than as polite or disinterested learning. There was, however, another side to science. Its study could exercise the higher faculties, occupy time that might otherwise be spent in less worthy pursuits and would illustrate the wisdom of the Creator.

Science, therefore, was considered not only for its 'usefulness', but also as a part of culture. It was, moreover, bound up with the idea that the acquisition of some branches of knowledge, particularly useful knowledge, was meritorious. A more noble aspiration was religious knowledge, which included natural theology. These two threads - the usefulness of science and its study as the praise of God - fused so that the practical application of science became, in turn, praiseworthy. The moral aspect of the propagation of scientific knowledge is obviously present in the paper which may have formed the subject for discussion when the founders of the London Institution met at the London Tavern in May 1805¹³. This paper mentioned the 'rational amusement' of scientific study which would keep those engaged in it from 'vicious or frivolous pursuits', and pointed out that an institution offering opportunities to improve knowledge of science and literature would be 'favourable to morals and virtue'.

Obviously the benefits to be gained from the practical application of science were also important. According to Berman¹⁴, it was this aspect that caused a division of opinion between the landed interest and the commercial interest in the early Royal Institution as to whom science should serve. He suggested that the commercial interests defected to the London Institution. It is therefore essential to investigate the occupations and interests of the original proprietors of the London Institution to establish whether this claim is justified.

13. See p.12.

14. See Berman, Thesis, p.162-193.

Such investigation, prosopography¹⁵, has advantages when considering large numbers of individuals about whom there is relatively little information, such as has been necessary in this study. Information about occupation, interests, place of residence, as well as other aspects of the subjects' lives, can be investigated and examined for significant common or dissimilar factors. Prosopography suffers from the disadvantages that information is far more abundant for some individuals than others, and records tend mainly to be about ownership of property and occupation. The lower one goes in the social scale, the less information is available. These problems are evident in the examination of the 965 original and elected members of the London Institution who are listed in Appendix I¹⁶. The quantity of material available about particular individuals need not bear any relationship to the importance of their activities in the Institution.

On the whole, the lives of those engaged in trade or commerce are not as well documented as those of the land-owning classes. Many of the early proprietors listed with their addresses in 1806 have been traced from London Directories. This has the drawback of giving the occupation only and not any of their interests, literary or scientific. Also, even in the early years of the nineteenth century, there was a tendency for people to move to residential areas rather than live at their place of work. At times, this makes tracing difficult, as does possible duplication of names where the address does not pinpoint a particular individual. However, with these reservations, the original proprietors of the London Institution may be classified as follows:-¹⁷

15. See L. Stone, "Prosopography", Daedalus, 100 (1971) p.46-79; also S. Shapin and A. Thackray, "Prosopography as a research tool in History of Science", History of Science, xii (1974), p.1-28.
16. See p.212-299.
17. See also Appendix II, p.300-319 for more detailed analysis.

Trade and Commercial interest	57.6%
Physicians, surgeons	6.0%
Scientific occupation or interest	6.4%
Proprietor or subscriber of RI	4.9%
Legal Profession	4.0%
Clergy	1.3%
Not classified or no information	26.2%

Despite the disconcertingly large group who are 'not classified or no information', there is still a considerable majority who were involved in trade or commerce.

Of the 47 proprietors and subscribers of the Royal Institution who became proprietors of the London Institution, 28 or nearly 60% were engaged in trade or commerce. Of the others, 2 were medical men, 6 had scientific occupations (e.g. instrument making) or interests, 4 were lawyers and 6 were not classified or no information available. The 60% adds weight to Berman's argument that it was the 'commercial' group who defected to the London Institution.¹⁸

Considering the proprietary as a whole, the 26.2% 'not classified or no information' is rather high and illustrates one of the main difficulties of the prosopographical method. The group does, however, include individuals whose occupation is known but who do not fall into the main groups, such as the Chief Clerk and Treasurer of Christ's Hospital (Richard Corp, James Palmer), surveyors (Charles Beazley, Lewis Leese), as well as Joseph Bushman, City Comptroller and William Barnard, mezzotting engraver, to name but a few. There are others who are probably connected with identified individuals (sometimes members of the same family) but about whom no other information has been found. Many of those about whom nothing else is known, had an address

18. Berman in his thesis uses different categories when classifying early RI members, e.g. Sir Francis Baring is grouped as 'colonial' (RI) whereas here (LI) he is listed as 'commercial'. The borderline between the two is hazy as colonial trade brought in money which led to financial and commercial developments. Berman's 'colonial' and 'finance/commerce' classes are here covered by 'trade and commerce', so the argument remains valid.

in the City of London. This suggests that their trade or occupation was, or had been, in the City even if it did not appear in a Directory.

With these considerations in mind, it is fair to say that the majority of those concerned in the foundation of the London Institution were engaged in trade or commerce so that the institution could reasonably be described as a 'commercial' offshoot of the Royal Institution.

The split between the landed and commercial interests in the early Royal Institution came about because of differences between the two groups over the use to which science should be put.¹⁹ Naturally some of those who possessed estates were concerned to know how soil fertility and crops might be improved, or how possible mineral deposits under their lands might be detected and exploited to the best advantage. By contrast, the business element would be more interested to know what overseas products might be a profitable commercial proposition. This section of the Royal Institution's proprietors contained a sizeable number of people with East India Company interests. They probably believed that knowledge of science would enable a more efficient exploitation of India and therefore it was desirable that EIC employees should have a scientific education.²⁰

In the management of the early Royal Institution, the landed interest was in the majority and the bye-laws governing the election of managers were such as to render it difficult, if not impossible, for another group to break in. By 1805, it must have been clear to the commercial interests that they had to find alternative paths to achieve what they wanted. It was in 1805 that the foundation stone of Haileybury College²¹, which was intended to give

19. See p.5.

20. See Berman, 'The Early Years of the Royal Institution, 1799-1810', Science Studies, 2, 1972. p.205-240, and especially p.236, 237.

21. See C. H. Philips (ed), The Correspondence of David Scott, Vol 2, Note 126, p.295-7.

See also, F. C. Danvers et al, Memorials of Old Haileybury College for a full account of the College.

a scientific education to E.I.C. employees, was laid by Sir Francis Baring and Edward Parry, both of whom were East India men.

Sir Francis Baring (1740-1810)²² was a London merchant who founded the financial house of Baring Bros. & Co. In 1779 he became a director of the E.I.C. He was leader of the City interest on the Court of Directors until 1798 and was chairman in 1792-3. for which he received a baronetcy. His advice was often sought on financial questions connected with the government of India. He was a proprietor of the Royal Institution and acted as the focus for the activities of the 'breakaway' group that started the London Institution, becoming the latter institution's first president from 1805 until his death in 1810.

It was in 1805 that a meeting of the dissidents took place in the George and Vulture Tavern in Lombard Street on 28th March. Nothing seems to have emerged from the discussion except that Sir Francis Baring was invited to take the lead at a public meeting held at the London Tavern, Bishopsgate Street, on 23rd May 1805, he took the chair.

At this meeting, George Hibbert explained the design of a proposed institution. George Hibbert (1757-1837)²³ was a West India merchant who played a large part in preparing schemes for the establishment of the West India Docks. He was chairman of the West India merchants until 1831 and was also agent for Jamaica. In addition, he was a patron of art, a collector of books and had a large collection of exotic plants at his house at Clapham. He was active in the London Institution's affairs, serving for many years as manager and president.

It is probable that two items, now in the Guildhall Library, formed the basis for discussion at this meeting. These are first, a handwritten paper, without date or signature but which, according to R. W. Frazer²⁴, is in Hibbert's handwriting and second, a printed paper, again undated.

22. DNB, C. H. Philips, The East India Company 1784-1834, various references also p.209 and p.217 below.

23. See also p.190 and Appendix I, p.248.

24. R.W. Frazer, Notes on the History of the London Institution. See also p.109.

The handwritten paper outlines the foundation of an institution which would consist of: 100 proprietors paying £100; 200 life-subscribers paying £30; and annual subscribers. The amount paid by proprietors and life-subscribers was to increase by £10 or 10 guineas each year of entrance after 1805. Once financial backing was assured, there would be lectures in chemistry, mineralogy, natural philosophy, botany and other subjects, held at a convenient time of day. The premises would have a lounge, library, laboratory, school of mineralogy and accommodation for the Askesian²⁵ and Mineralogical²⁶ Societies.

The printed sheet goes into more detail about the proposed institution's aims and outlines the estimated expenditure. Probably £10,000 would be needed to purchase and adapt a building; £7,000 would be sufficient to found a library and apparatus collection; and £2,000 would be the probable annual expenditure.

The aims of the institution would be high and far-reaching: "to excite, to encourage or to preserve the love of science and literature; to afford rational amusement or instructive employment to the young or the unoccupied; to withdraw from vicious or frivolous pursuits talents adapted to prove beneficial to society; to give a useful direction to the curiosity of the inquisitive and the attention of the studious; to provide for literary men a deposit easy of access where they may peruse or consult authors whose works either by their magnitude or value are excluded from the possession of the ordinary purchaser; an Institution calculated to effect these purposes must equally deserve and receive the patronage of the scholar and the gentleman; the rich and liberal would derive lasting satisfaction by

25. Founded in 1796 to encourage scientific enquiry. Several original LI proprietors were members. (Woodward, History of the Geological Society, p.6-9).

26. Founded in 1799. Again, many original LI proprietors were members as were several Askesian Society members. The two societies provided the nucleus of the Geological Society founders in 1807. (Ibid. p.6-9).

being instrumental in increasing the public stock of rational pleasure; in advancing the state of knowledge which is favourable to morals and to virtue and which tends to render attainable the utmost intellectual perfection of which our nature is susceptible."²⁷

However, to return to the meeting of 23rd May 1805²⁸. It was resolved that an institution be established in some central position in the City of London. This Institution was to consist of a limited number of proprietors and life and annual subscribers. The proprietors were to pay 75 guineas each and their interest in the institution was to be equal, permanent, transferable and hereditary and to extend to the absolute property of the establishment. The life-subscribers, paying 25 guineas, were to have the same use of the institution as proprietors but to have no say in the management. The conditions for annual subscribers, whose payment was not specified, were to be the same as for life-subscribers.

It was also decided at this meeting that, as soon as one hundred persons had declared their intention of becoming proprietors, a general meeting should be convened to put the plan into effect. This general meeting should appoint a committee to draw up regulations for the institution which would be put to a further general meeting for approval. Finally, it was resolved that the full title of the new institution should be: "The London Institution for the Advancement of Literature and the Diffusion of Useful Knowledge."

A committee of seven, headed by Sir Francis Baring, was appointed to receive the names of those interested in becoming proprietors or life-subscribers and to deal with the business of the institution until a general meeting of proprietors could be held. The subscription list was opened immediately after this and so many signed that it was decided to hold the

27. From a collection of papers at the Guildhall Library, bearing on the early years of the LI.

28. Minutes of meeting, 23rd May, 1805.

general meeting on 23rd May 1805, again at the London Tavern.

At this meeting,²⁹ the subscription list was still open and before the meeting closed the sum promised had reached £60,000. It was agreed to petition the King for a Charter and to lay an outline plan of the institution before the Secretary of State for the Home Department. In addition, a temporary committee of 22 managers, headed by Sir Francis Baring, was appointed to prepare the outline plan which would be submitted to the proprietors for their approval, and also to do anything necessary for the establishment of the institution, including the purchase of books and furniture, and the appointment of officers and servants. This committee also had the power to elect suitable individuals as proprietors. Sir William Curtis was appointed treasurer to collect the promised subscriptions and to pay them into the institution's account at the banking house of Robarts & Co.

At the start of the London Institution's career it had close similarities with the Royal Institution. The hereditary proprietorship, which carried with it the right to take part in the government of the institution, as well as the form of that government (with managers and visitors) followed the practice of the early Royal Institution. This is not altogether surprising when it is considered that of the 23 members of the temporary committee (including Sir William Curtis) nine were proprietors or subscribers of the Royal Institution³¹. This number (39%) was slightly lower in the first committee under the Charter (32%)³² but was still much higher than the 4.9% for the proprietors as a whole.

29. Rough Minute Book of the Committee of Managers.

30. See Appendix III, p. 320-322.

31. These were: J. J. Angerstein, F. Baring, R. Clark, B. Harrison, H. Hoare, W. H. Pepys, J. Rennie, H. Thornton, W. Manning.

32. In the first committee under the Charter, the above were joined by fellow RI members: S. Boddington, T. Bonar, W. Saunders.

As we have seen, one obvious difference between the London Institution and the Royal Institution was in the composition of its proprietary. Of the original proprietors, 57.6% were in some branch of trade or commerce.³³ The only apparent representative of the landed interest was Lord Dundas. He was a considerable land-owner but in addition was involved in industrial enterprise, being instrumental in founding the first soda-producing plant in Scotland as well as having an interest in a chemical factory at Dalmuir. He was also the patron of the steamboat engineer, William Symington. Possibly Lord Carrington might also be considered as a landowner, since he owned large estates in Buckinghamshire and Lincolnshire, although his wealth derived from banking.

At this point it might be pertinent to speculate on the possible motives of those who became proprietors. When the foundation stone of the Finsbury Circus building was laid on 4th November 1815, Charles Butler,³⁴ the first standing counsel of the Institution made a speech³⁵ in which he expressed some of the aspirations of the founders. By bringing science and commerce together, the new institution would put new vigour into both. Not only did science aid commerce, but without commerce, literature, science and the arts would languish. To the union of science and commerce could be attributed the nation's prosperity, both in agriculture and manufacturing, together with the "graceful dignity and conciliating ease of high life, the countless decencies of the middle ranks, the cheerful industry of the lowest", to say nothing of veneration for the Constitution and regard for law and order. On a more practical level, the useful application of science could be seen in the development of the steam engine and the invention of Davy's safety lamp.

33. See p.6 and Appendix II, p.319.

34. See Appendix I, P.299.

35. C. Butler, The Inaugural Oration, spoken on the 4th day of November 1815. (In British Museum). The speech was also printed in Gent. Mag. 1815, Vol.85, pt.2, p.179-181.

Perhaps the new institution would be in the fortunate position of being able to help those who had similar schemes in mind to bring them to practical form. Finally, should science ever be neglected in this country and be encouraged in others, "the commercial part of the community would, in all probability, suffer sooner and more from the consequences." Although, had they been asked, the original proprietors might have mentioned such elevated motives for supporting the institution, it is probable that they had other, more immediate reasons.

Bearing in mind the commercial interests of the majority of the early proprietors, it might be asked why, instead of establishing a new institution, they did not join the Society of Arts, which had been founded "for the encouragement of Arts, Manufactures and Science"³⁶. The probable answer is that the Society's interests tended to be centred on design.³⁷ For example, it was interested in improvement of transport and gave awards for vehicle designs, as well as for methods of improving canal transport. It was also interested in the improvement of sea transport, but was not immediately concerned with overseas exploitation and trade, which were the chief occupations of E.I.C. members and other merchants.

As has already been said,³⁸ there was a split between the landed and commercial interests in the Royal Institution and so the proprietors and subscribers of that institution who joined the London Institution may have done so because they wished to play a part in the running of a scientific institution and thus to direct its policy. It is noticeable that no member of this group was a manager of the Royal Institution.

There was another important group to be found among the original proprietors. This included William Hasledine Pepys,³⁹ William Allen,⁴⁰

36. See p.2.

37. See Hudson and Luckhurst, The Royal Society of Arts, Ch.8, 'The Encouragement of Commerce'.

38. See p. 5, 7.

39. See Appendix I, p.269.

40. Ibid. p.214.

William Phillips⁴¹, Arthur Arch⁴² and several others, most of whom were members of the Askesian⁴³ and Mineralogical⁴⁴ Societies, and also of the Society of Friends. At this period, many Quakers were interested in education and many Quaker physicians and surgeons, including John Coakley Lettsom⁴⁵ and William Hawes⁴⁶, both original proprietors, were active in the promotion of higher standards of professional training. Pepys and Allen in particular were closely associated in many scientific activities, especially in studies of respiration.⁴⁷ That this group was greatly interested in the possibilities of the new institution is clear from the mention of the Askesian and Mineralogical Societies in the discussion paper of 23rd May 1805 and is probably the reason behind Sir Francis Baring's query to Davy about the possibility of the institution granting medical degrees.⁴⁸

Others, perhaps those with scientific interests, may simply have arrived on the scene too late to join the Royal Institution, for which there were virtually no proprietorships available after 1803, and which, in any case, were expensive (100 guineas) by this time.⁴⁹ It may also be that people preferred to join an institution near their home, as most of the early proprietors give a City address.

Still others may have been influenced by the appeal of being sufficiently enlightened to patronise and support science. Some proprietors certainly wanted not only to patronise learning but also to be seen doing so as can be seen in the Finsbury Circus building, which was designed in the latest

41. Ibid. p.270.

42. Ibid. p.215.

43. See p.12, note 25.

44. Ibid. note 26.

45. See Appendix I, p.259.

46. Ibid. p.247.

47. See J. R. Partington, A History of Chemistry, Vol.3., p.714-5.

48. See p.19.

49. See Berman Thesis, p.245; also RI Managers' Minutes, Vol. I.

architectural style and for which, even when costs might have prohibited erection of the lecture theatre, the managers refused to consider relinquishing the Portland stone front.⁵⁰

It is tempting to suggest that booksellers and scientific instrument makers hoped that the new institution might require their services in the supplying of books and apparatus and thought that they would be more likely to obtain such business as proprietors than as outsiders.

The motives of others were probably even more vague and problematical. They may genuinely have thought that scientific knowledge could improve their business prospects, or have envisaged a sort of scientific 'club' with useful contacts or the opportunities of mixing with those of greater wealth and higher social status.

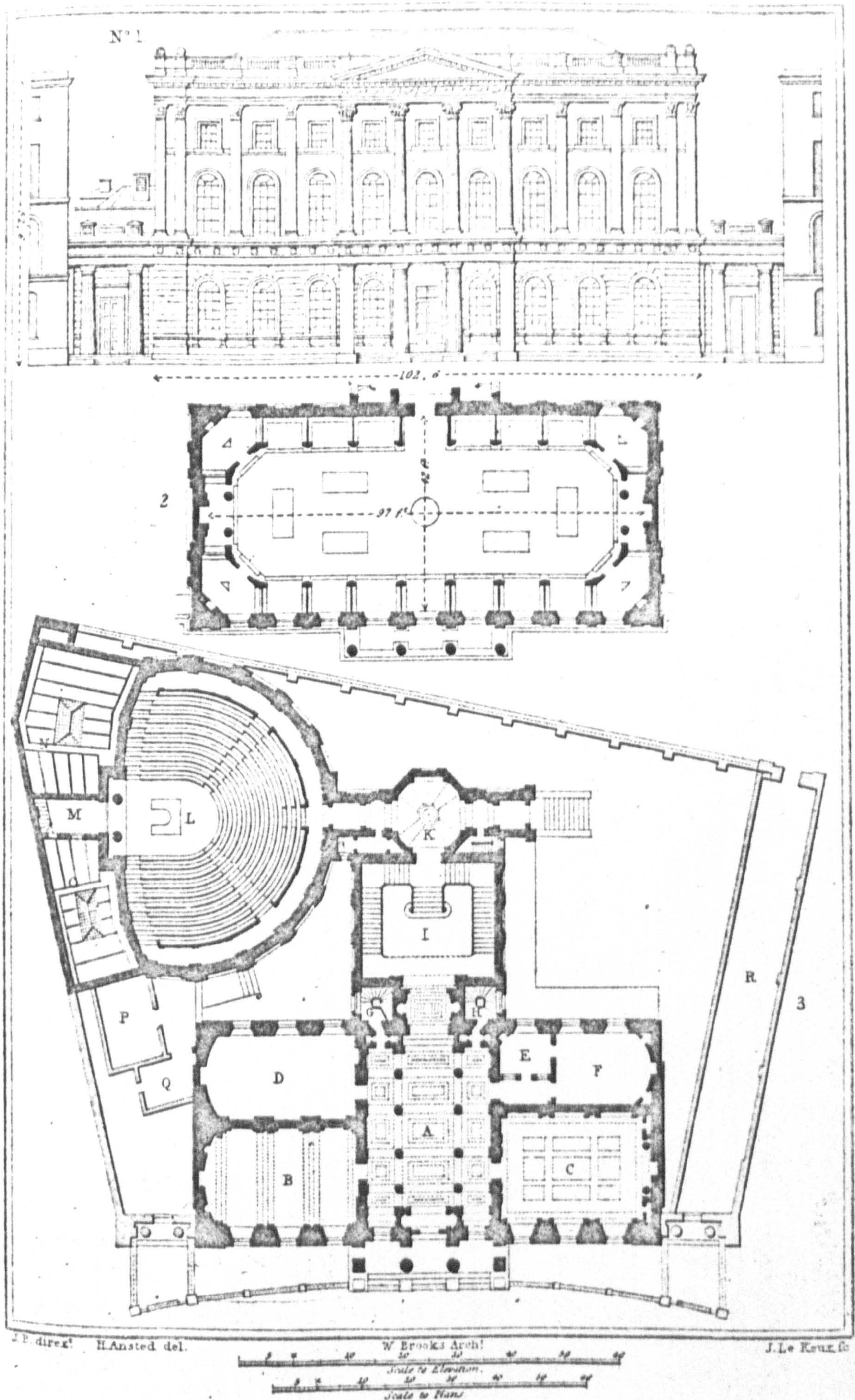
When the temporary committee met on 11th June 1805, there had already been an exchange of civilities with the committee of the Royal Institution, who had been assured that the activities of the two institutions would not interfere or overlap. The London Institution hoped to achieve in the City of London what the Royal Institution was doing for Westminster. The managers of the Royal Institution received this news with approval and expressed themselves as ready to give any assistance that might be required. Far from intruding upon one another, the two institutions would 'rather increase the public interest in favour of their objects and promote the success of both by the mutual assistance and beneficial co-operation which they may be enabled to render to each other.'⁵¹

At the same meeting, it was resolved that Sir Francis Baring should communicate to the Secretary of State for Home Affairs that "a plan in many ways conformable to that of the Royal Institution is proposed to be carried into effect in the City of London"⁵². When the details of the plan had been settled, the managers would petition the King for a Charter.

50. See p.68.

51. RI Managers' Minutes, 27th May 1805.

52. Minutes of Temporary Committee of Managers, 11th June, 1805.



THE LONDON INSTITUTION, MOORFIELDS.

N°1. Elevation of Principal front: 2. Plan of library on upper Story: 3. Plan of Ground Floor.

Plate II.

London, Published May 1824, by J. Taylor, High Holborn.

Sir Francis Baring also wrote to Davy asking for advice on the structure of the new institution. Davy, in reply,⁵³ suggested that a museum should be built, consisting of a large room or a suite of rooms, which ought to contain "the most important articles employed in Commerce, and in the useful Arts and Manufactures, in their raw states and in their different states of preparation". He also considered that it would be advantageous to have a laboratory for experiments to be carried out in any of the important branches of manufacture which might be improved by scientific advance. In addition, the proposed institution would be of value to young men training for a career in commerce. From this letter it is clear that Davy was thinking in terms of a 'commercial' version of the Royal Institution. Baring had also asked Davy about the possibility of the London Institution being empowered to grant degrees in medicine, an idea that met with Davy's approval. At the end of his letter Davy expressed his willingness to give his "services in this matter". This may have been simply courtesy or it may have been an offer, perhaps, to lecture at the London Institution, which he never did,⁵⁴ although his successor, W. T. Brande, gave the opening lecture in the Finsbury Circus building.⁵⁵

By contrast, Sir Joseph Banks was not enthusiastic. Sir Francis Baring wrote to him on 10th October 1805, hoping that he would agree to becoming either a vice-president or a visitor. Banks thanked him but refused the request and expressed his doubts as to the value of the new institution. He did, however, ask to purchase a share and thus, by becoming a proprietor, he would be "bearing a proper proportion of the expense of the undertaking."⁵⁶

53. Letter from Davy to Baring, 30th Oct. 1805 (Facsimile of letter from Sir H. Davy to Sir F. Baring, 3rd Oct. 1805, in RI collection of Miscellaneous Reports, etc. Series P, Vol.2.

54. Davy was elected an honorary member of the LI on 11th June 1818.

55. See p.125.

56. Letter from Banks to Baring, 14th October 1805. See also p.211b.

An important problem faced by the temporary committee was the acquisition of suitable premises. The committee held its early meetings at the London Tavern but by the end of 1805, temporary accommodation had been obtained at 8 Old Jewry,⁵⁷ whither the Institution moved in January 1806.

During its year of office, the temporary committee authorised the purchase of large numbers of books and so laid the foundation of the library which was to become such an important feature of the institution. It is possible that such a large library was collected at this stage because two of the temporary managers were book collectors. George Hibbert⁵⁸ had a notable collection as did Matthew Raine⁵⁹, whose collection of classical works was eventually presented to the library of Trinity College, Cambridge. In addition, at least two other members of the committee, Richard Clark⁶⁰ and Richard Sharp⁶¹ had considerable interest in literature.

Obviously the main preoccupation of the temporary managers were the formulation of the plan and bye-laws of the Institution and obtaining the Charter. The first copies of the plan and bye-laws were printed in 1806 and the Charter passed the Great Seal on 21st January 1807. Later that year, the temporary committee was able to hand over the running of the Institution to the first full committee, which was to carry out the main aims as outlined in the plan of 1806, namely:

1. The acquisition of a valuable and extensive library.
2. The diffusion of useful knowledge by means of lectures and experiments.
3. The establishment of a reading room, where the foreign and domestic journals, and other periodical works, and the best pamphlets and new publications, shall be provided for the use of the Proprietors and Subscribers.⁶²

57. See p.53.

58. See p.8, also Appendix I, p.248.

59. Ibid. p.273.

60. Ibid. p.229.

61. Ibid. p.278.

62. Plan and Bye-laws of the LI, 1806.

It is these aims that have governed the lay-out of this study to make an assessment of the dynamic significance of the Institution. Using Parsons' analysis of an institution,⁶³ the institution has to alter its activities to adjust to changing social conditions. The main areas of interest in the London Institution were the library, the laboratory, the lectures and the building which had to house all these activities. All these were modified during the Institution's life, partly to accommodate the changing demands made upon them. However, the main constraint on the Institution's activities was finance, a factor that Parsons does not consider in his analysis. The amount of money available and the way in which the managers allocated it dictates how much could be spent on lectures, books, apparatus and so on. Money was also required to erect and maintain the building. Towards the end of the century, it was the considerable financial outlay required for major structural repairs that led eventually to attempts to merge the Institution with other organisations,⁶⁴ culminating in the acceptance of the recommendations of the Royal Commission on University Education in London⁶⁵ and the establishment of the School of Oriental Studies. Although the name 'London Institution' remained when the School was founded, the organisation that bore the name was completely different and is therefore considered separately.⁶⁶

The Institution started life in a period of rapid economic and social change. Ideas of the power of science were optimistic, whether science was considered from a cultural or utilitarian point of view. From discussions which took place before the Institution was launched, it appears that the founders hoped, possibly, to give a scientific education to people other than the Institution's own members,⁶⁷ and also to house other societies.⁶⁸ Neither of these aims was to be achieved in the form envisaged although later in the Institution's career, education lectures⁶⁹ were given and rooms rented to other organisations.⁷⁰

63. See p.210.

64. See p.200-204.

65. See p.204-206.

66. See Ch.7, p.180-184

67. See p.9.

68. Ibid.

69. See p.138.

70. See p.44-48.

The financial grounding of the Institution was sound. As has been said, £60,000⁷¹ had been promised by 28th May 1805, and this was to increase to over £80,000⁷² by the time the Institution was formally organised. It might be thought, therefore, that the Institution was set fair to achieve all that it set out to do. Unfortunately, things did not work out quite like that and before many years had passed, the managers were concerned about finances⁷³. It was this problem that was to dominate the scene and to determine, to a very great extent, the goals that the Institution was able to attain.

71. See p.11.

72. See p.24.

73. See p.26, 27 and p.34-38.

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Chapter 2.

Finance and Management of the Institution.

The initial financing of the London Institution was provided by the payments of proprietors and life-subscribers. According to the first auditors' report,¹ the money was subscribed as follows:

961 proprietors at £78-15-0 each	£75,678-15-0
74 life-subscribers at £26-5-0 each	£ 1,942-10-0
4 life-subscribers at £36-15-0 each ²	£ 147- 0-0
Deposit from intending life-subscriber	£ 8-15-0
	<hr/>
Total	£81,952-16-0

Of this, nearly £67,000 was invested in Consols to provide an annual income. The other possible source of annual payment, annual subscribers, was not tapped at the start of the Institution's life. This situation contrasted with that at the Royal Institution, where there were far fewer proprietors and the Institution depended upon annual subscribers for its income. In any case, the Royal Institution had little money to invest as the Albemarle Street building had been purchased very shortly after the Institution was started.

Those responsible for planning the London Institution may have thought that annual subscribers were rather an unreliable source of income. They could justify this opinion by pointing out that the Royal Institution had had a serious financial crisis in 1803³, when one of the managers had

1. First Auditors' Report to end of 1806 (i.e. before Charter), presented in April, 1807.
2. Life subscription raised from 25 gns to 35 gns in 1806.
3. R.I. Visitors' Minute Book, Vol.I 1800 - 28, p.91.

gone so far as to suggest that the Institution be wound up to pay off its debts. (It was saved by each manager and visitor paying £100 into the Institution's funds.) On the other hand, if the Royal Institution's method of obtaining an annual income was not considered safe by the planners of the London Institution, they themselves were liable to be caught in the trap that if, for any reason, investments had to be sold, as some of them were to pay for the Finsbury Circus building, the Institution's income was automatically reduced.

Eventually, both institutions found that a system of hereditary proprietorship had serious disadvantages. The Royal Institution came to this conclusion in 1810 when the proprietors gave up their hereditary rights but did not have to make an annual payment, so that they effectively became life-members. Each new member then had to pay a fee on his election to the Institution. The London Institution waited until 1821 before admitting defeat on this issue, when it solved the problem by obtaining an Act of Parliament⁴ so that each proprietor had to pay a maximum of two guineas per year on each share to retain his proprietary rights.

However, to return to the earlier years of the London Institution, once the managers had received the subscriptions of proprietors, they seem to have authorised expenditure with little supervision of those responsible for paying out money on their behalf. Although it is difficult to estimate the extent of their difficulties because no proper balance sheets were prepared but only lists of income and expenditure, the fact remains that

4. See p. 31 - 34

at the annual meeting in 1811,⁵ the managers made an appeal to the proprietors for money, which was unsuccessful. By the following year, the premises in Kings Arms Yard⁶ had been purchased and the financial position was worse.

It was therefore decided to appoint a committee of enquiry to investigate the affairs of the Institution. This committee consisted of seven members of the board of management and seven ordinary proprietors. The committee found that almost £20,000 had been spent on books and apparatus since the foundation of the Institution and that by 1812, expenditure exceeded income by about £330 per year.

After a careful examination of the running of the Institution, together with its various expenses, the committee gave instances where it felt that economies could be made. For example, money could be saved by reducing the number of librarians employed from three to two and also by allowing both remaining librarians to live on the premises (although it is far from clear why this should be an economy). It was also, the committee thought, unnecessary to employ somebody at a salary of £150 per annum to look after the apparatus, when the apparatus was not even being used. It would be better to have an 'optician' to look after it and pay him about £20 per year until the apparatus was brought into

5. On 25 April 1811, at the annual meeting, it was decided to improve the L.I.'s financial position by appealing to the proprietors for funds. At the start each proprietor had a transferable ticket which gave admittance to the library, news-room etc. and it was suggested that those who wished to retain this right should pay 25 gns. If less than 600 proprietors signed agreement to this within 6 months, the scheme would be dropped. A total of 410 signed. The main purpose of the appeal was to raise money to build a lecture theatre.

6. See below, p.55.

regular use.

There were also too many people, employees of the Institution, living in the building and getting items allowed to them which had not originally been intended. These items included coal, candles, soap, washing, purchase of bedding (including bedlinen) and so on, until "at length, totally without the knowledge and in direct violation of the written orders of the Committee of Managers",⁷ the Institution was paying a large bill for 'sundries'. In addition, coal and lamp oil were being purchased weekly, when needed. This meant that they had been bought mostly at winter prices. It was recommended that these items be obtained annually, at summer prices. By doing this, and reducing the number of fires in the building, expense could be cut by a quarter.

The result of the investigation was that the number of domestic servants was reduced, one of the sub-librarians, James Ilbery, was dismissed at the end of 1812, the number of journals taken for the news room was cut down and the amount spent each year on books was sharply reduced.

Towards the end of 1813, the board was hoping that it would be able to obtain a plot of ground in Moorfields⁸ for the erection of a suitable building. It was therefore decided that it would be necessary to increase the funds of the Institution by appealing to the proprietors. Any proprietor who subscribed 30 guineas would be entitled to an additional transferable ticket and eventually 106 proprietors subscribed. The managers also hoped that a suitable building and lecture theatre could be

7. Report of Committee of Enquiry, 1812.

8. An Act of Parliament (52 Geo III Cap 210) was passed in 1812 to enable the Moorfields ground to be built upon.

on the site for £20,000.

The use of transferable tickets as an incentive to subscribe is interesting. Proprietors of the Royal Institution had such tickets but they were reduced in number around 1803 because, it was argued, people using such tickets reduced the number of seats available at lectures for annual subscribers, upon whom the Institution depended.

When the managers invited tenders for the new building, the lowest, from Thomas Cubitt, was £22,000 for the main building and £4,000 for the theatre. However, after the building was started, it was found that the cost was going to be greater than at first thought, even before the unfortunate discovery that deeper foundations were going to be needed because of the spongy nature of the ground, which increased to cost by £350. Several economies were made and in the end the total cost came to £24,712.⁹

To meet this cost, the managers resolved, in June 1816, that the treasurer be requested to prepare powers of attorney to enable him to sell, under the instructions of the board, £8,333-6-8d stock in 3 per cent consolidated annuities and £8,333-6-8d in 3 per cent reduced annuities, part of the £33,333-6-8 of each stock held in the Institution's name.

However, as this did not cover the whole cost and the freehold still had to be purchased, as well as furnishings and fittings for the building, the managers appealed to the proprietors. They described the "zeal and success"¹⁰ which had attended the creation of similar establishments in various provincial towns¹¹ and hoped that the proprietors would " . . . consider it essential that the Metropolis of the British Empire should

9. See chapter on premises, pages 66 - 67

10. Minutes of Special General Meeting of Proprietors, 30 Jan. 1817.

11. No names given, and most provincial Literary and Philosophical Societies were founded after this. However similar societies had been started in Warrington (1811), Liverpool (1812) and Plymouth (1812).

possess a depository of literature and science."¹² Furthermore, they asked, "Having accomplished this much, shall all in the past be rendered of no avail? Can the zeal of the proprietors become faint when the object of their wishes is within reach? Or, from the want of one generous effort will they submit to relinquish these expectations which they once cherished with so much confidence?"¹³

It was decided that there should be an open subscription when each proprietor could be expected to donate 10 guineas. If proprietors wished to donate more, then the following privileges could be obtained: a subscriber of 30 guineas would be entitled to an additional perpetual transferable ticket to the library, or be able to exchange this privilege for the nomination of a life-subscriber; a subscriber of 100 guineas would be entitled to three additional transferable tickets or, if he wished to exchange this privilege for the nomination of three life subscribers or one proprietor; any persons (not exceeding four in number) whose joint subscriptions amounted to 100 guineas or more should be able to nominate a proprietor in lieu of all other privileges; finally, if a subscriber of 30 guineas did not use his privilege, it should be transferable with his share. Unless the sum subscribed amounted to £12,000 within three months the whole subscription should be void. The managers felt confident that the scheme would work as it was in the interests of all concerned.

By April, 1817, when the annual general meeting was held, the managers were able to announce that over £12,000 had been collected, given by about half the proprietors.

12. Minutes of Special G.M. 30 Jan., 1817.

13. Ibid.

Meanwhile, work continued on the building, but in September 1817 the managers were informed that it would not be ready on time and also that, despite the £12,760 already subscribed, a further £2,500 would be needed for 'extras' if the Institution were not to end up with a deficit. Those proprietors who had not so far contributed were appealed to. By the time the 1819 annual meeting came round, the deficit had risen to £4,000, which included £1,500 for the purchase of the freehold. The appeal to those proprietors who had not yet subscribed had not been particularly successful but the managers hoped that they might be persuaded to contribute when they saw the new premises.

The delay in opening the building meant that the courses of lectures which had been planned could not be given and only the course on Light, Heat and Voltaic Chemistry, by W.T. Brande, could be delivered. The managers decided to charge for admission for the lectures. Anyone recommended by a proprietor was to pay 2 guineas for a course, which would be reduced to one guinea for the holder of a transferable ticket.

If attendance at the first course of lectures proved sufficiently encouraging, the managers proposed that annual subscribers, having the same privileges as life subscribers should be admitted at five guineas per year. Four guineas would give admission to lectures only, three guineas would admit subscribers to the library and reading rooms but not to lectures, and admission to one series of lectures only would cost three guineas, which would be reduced to one guinea for the holder of a transferable ticket.

In their report to the proprietors in 1820, the managers confessed that, although £13,200 had been raised by the proprietors, the cost of

running the new building had been underestimated. As a result, the financial outlook was "not favourable to the prosperity of the Institution".¹⁴ To discharge all claims against the Institution £7,000 would be required and since it appeared that an appeal to the proprietors would not be effective, alternative methods of raising money would have to be considered. It was also clear that the charges for admission to lectures were not going to be a reliable source of income as at the Royal Institution, as the cost of giving the lectures had not been covered.

At a special meeting of the board on 21 June 1820, it was decided that Charles Butler, the Standing Counsel to the Institution, should be asked if it would be possible to obtain legislation that would compel proprietors to pay a yearly sum (he suggested two guineas) on each share. A month later, on 20 July, the proprietors held a special general meeting to consider the managers' proposals for economising and also for increasing the Institution's income. One proposal was that part of the library should be made into a circulating library for those managers willing to pay an extra one or two guineas per year for it. The other was that, under authority of Parliament each proprietor should make an annual contribution, or, what came to the same thing, a relinquishment of proprietary rights which had to be repurchased annually.

The first proposition, to put books into circulation,¹⁵ was, the managers said, far too inconvenient. It would mean large purchases of new popular books and the "gradual destruction"¹⁶ of the library, to say

14. Annual Report for 1820.

15. See Chapter on library, p.112

16. Minutes of Special General Meeting, 20 July, 1820.

nothing of the difficulties that would occur if a proprietor came in to consult a book, only to find that it was out on loan. It was also too uncertain a source of revenue as it would be vulnerable to fluctuations in demand. No further consideration, therefore was given to this suggestion.

The second proposition, however, did not have any such disadvantages. The managers, therefore, sought the proprietors' agreement to obtain legislative authority to levy an annual payment and the following resolutions were put to the meeting:

1. That this court approves of the proposal for providing a fund sufficient for the support of the London Institution in all its departments, by a contribution under legislative authority, of a sum not exceeding two guineas annually from every proprietor, provided that under the same authority every dissident proprietor who may signify such dissent before a day to be named, be entitled to receive from the funds of the establishment the value of his share at a fair estimate of the market of the day.
2. That the managers be authorised to take effectual measures for ascertaining the assent or dissent of absent proprietors to the foregoing resolution, and to take the preliminary steps for an application to Parliament for an Act, which, with all such provisions as may be suggested by able counsel, shall have the effect above mentioned.
3. That the managers do, as early as possible, communicate to a general court of proprietors to be summoned for that purpose, their determination to act as above mentioned.¹⁷

Any proprietors disagreeing with these proposals were asked to enter their names in a book provided for the purpose, or by letter. By October fewer than one hundred proprietors had dissented and so the managers felt able to ask Charles Butler the Standing Counsel of the Institution,¹⁸ to prepare a draft of a petition to the House of Commons for leave to bring in a bill for a maximum annual levy of two guineas.

By April 1821, the managers were able to report to the proprietors that the bill had been introduced into the House of Commons by Davies Gilbert.¹⁹ It had received two readings and would probably pass the Commons before long. A copy of the bill had been sent by the Institution's president, Lord Carrington, to Lord Shaftesbury, who did not foresee any objection being raised in the House of Lords. The bill, 'An Act for providing an Increase of the Annual Income of the London Institution' (1 & 2 George IV Cap LXVII) received the Royal Assent on 28 May 1821. A total of thirty-three proprietors had objected to the annual payment and the board had purchased their shares at a cost of £35 each. By way of compensation to the proprietors who had agreed to the annual levy, the transferable tickets were now to give free admission to the lectures.

18. Charles Butler (1750 - 1832) was the first Standing Counsel of the London Institution and was elected a proprietor on 2 December 1806.

For further details see Appendix I p. 299

19. Davies Gilbert (formerly Giddy) (1767 - 1839) took his wife's name of Gilbert in 1817. He was M.P. for Bodmin from 1806 until 1832 and played a prominent part in parliamentary investigations connected with the arts and sciences. He calculated for Richard Telford the length of chains necessary for the Menai Bridge and made calculations to assist Richard Trevithick and the two Hornblowers in their endeavours to improve the steam engine. He was treasurer of the Royal Society from 1820 to 1827 when he was elected President, a position he held until 1830. On 14 June 1821 he was elected an honorary member of the L.I. (DNB, L.I. managers' Mins. A.C. Todd, Beyond the Blaze.)

For the first few years after the passing of the bill, a mood of optimism prevailed. Courses of lectures had been established and were well attended.²⁰ Nevertheless, some economies were needed and in 1824 it was decided that lectures had cost too much during the previous season and so the number of courses offered would have to be reduced.²¹ Another source of expense was the gas system which had started to give trouble soon after it was installed.²² The managers also regretted that activity in the laboratory had not kept pace with the lectures "owing principally to a deficiency of funds to supply the constant expense of any regular and permanent system of research."²³

By the time the annual report for 1829 was prepared, the managers had to admit that, despite attempts to economise, their measures had proved unsuccessful. In particular, the gas apparatus was proving expensive to run. Quite a large sum of money was owing for cleaning and repairing the building and the board felt "at a loss what plan to pursue to reduce the permanent and regular expenditure below the amount of income, without trenching upon the convenience or gratification of the proprietors."²⁴

As a result, a committee of enquiry was set up. It consisted of twelve proprietors who were to investigate the affairs of the Institution and report to an adjourned meeting of proprietors to be held on 30 June 1829. The committee was recommended to investigate alternative methods of gas

20. Annual Reports for 1823, 1824, 1825, 1826.

21. Annual Report for 1824.

22. See "Premises" p. 69

23. Annual Report for 1828.

24. Annual Report for 1829.

supply as it was felt that the manufacture of gas on the Institution's premises should be stopped.

The particular points to which the committee of enquiry was directed were:

1. The general affairs of the Institution.
2. To confer with the managers as to the best method of dealing with the waste ground on the north side of the building.
3. To consider whether a supplement to the library catalogue should be printed.

Since the financial affairs were the main object of the enquiry, these were investigated in detail. The committee found that, to meet debts of £1,446-18-7d the Institution had £571-15-8d cash in hand. Money could be raised by selling some of the scientific apparatus, which had become useless and which had an estimated value of £250. Also, there were 31 unsold shares which could be sold by the managers. However, these could not be disposed of immediately and so the committee recommended that some of the £2,000 consols which were held beyond the amount specified in the bye-laws should be sold.

Turning to the annual receipts and expenditure, the committee found that the average expenditure of the previous three years had been about £3.450 and the annual income £3,000, so that economies had to be made somewhere. When the annual subscription had been introduced, the money was collected by a Mr. Buck, who received $2\frac{1}{2}\%$ commission. This had risen to 4%, although it is not known when such a rise was agreed to. He received his commission whether the subscriptions were paid to him or to the Institution's porters. It was recommended that, in future, the money

should be paid to the porter, Gregory, who would receive, perhaps, £20, and whose salary should be reduced from £135-12-0 to £100.

Lecture charges were high because Mr. Styles who looked after the apparatus attended at the Institution every day that a lecture was given, to clean the apparatus and do any small repairs necessary. Over the previous ten years he had received £1,200 or £120 per year and his account had been considerably more for the previous three years. A saving of perhaps £50 could be made if he did not attend lectures where scientific apparatus was not needed.

The expenditure for cleaning and repairing the building, which had caused the enquiry in the first place, was considered too high and the committee recommended that the next time it needed doing, tenders should be requested.

Meanwhile, the committee reported, the managers had come to an arrangement with the Chartered Gas Company. The charge for gas would not exceed £275 per year, whereas the average annual expenditure for the previous three years had been £597. A further advantage was that, with the gas-plant closed down, the insurance rate would be reduced from 'hazardous premium' to 'common risk', a decrease of £18.

If the committee's recommendations were followed, the annual expense could be reduced by just over £500, while the sale of the thirty-one shares would increase the income by £65-2-0.

Next, the waste ground at the rear of the Institution building was considered. It was recommended that the heaps of rubbish should be levelled and covered with gravel. Nothing would be gained by letting it upon lease because any ground rent received would be small and any buildings erected

so near to the Institution could present serious inconvenience and might prevent future improvements to the building.

Finally, the matter of printing a supplement to the library catalogue was considered. There were 227 copies of the catalogue still unsold and the committee felt that they were unlikely to remain so unless a supplement were printed as so many books had been added to the library since 1813 when the catalogue was printed. Three hundred copies of a supplement could be printed for less than £20. The committee thought that this should be done immediately and the supplements sold at 1/6d each, or the catalogue and supplement together for 7/6d.

When the reasons for the Institution's difficulties were considered, the committee was of opinion that they could be traced back to lack of adequate supervision by the managers. Little attention had been paid to the bye-laws and practice of appointing sub-committees to superintend different aspects of the Institution's management had largely lapsed. For example, instead of having a book committee to superintend the ordering of books, controlling the attendance of the librarians and checking the books periodically, the whole responsibility was left to the librarian. This, the committee thought, had led to an insufficient supply of books and inadequate staffing.

The committee also found that the sub-librarian was "the unacknowledged book-seller to the Institution the Institution only obtains an allowance of 12% upon the books bought, while the sub-librarian gets a further allowance from the book sellers from whom he buys."²⁵ This practice had to stop and books bought by the Institution were to be obtained at the lowest possible price. To compensate for loss of income, the

sub-librarian ought to be paid an extra £20 per year. The sub-librarian also acted as assistant secretary, a duty that presumably dated from January 1810 when the House and Book Committees decided to combine the office of clerk with that of sub-librarian. The result of this was that the accounts were not kept properly and the committee felt that it was wrong to expect the sub-librarian to deal with accounts. In future, a proper system of accounting should be adopted and, if this was more than the sub-librarian could manage, a regular book-keeper should be employed.

No apparatus committee existed and Mr. Styles, over the previous year, had acted on his own initiative in keeping the apparatus in repair. Much of it was obsolete and the committee wondered "whether it would not be advisable gradually to part with a considerable portion, if not the whole of the apparatus . . .".²⁶ However, until this was done, an apparatus committee should be appointed and an inventory of apparatus immediately prepared.

A house committee, or similar body, should carefully check all tradesmen's bills before they were paid. No orders should be given to tradesmen, or any one else, except by the managers or one of the committees.

The report concluded: "Your committee have been unable to learn in whose names the funded property of the Institution is vested and they also regret to find that the office of Visitor has, for some time past, been merely nominal, that body not having attended or been summoned for some years."

When the adjourned court of proprietors met on 30 June 1829, they

25. Report of Committee of Enquiry, 1829.

26. Ibid.

decided to retain the services of Mr. Buck, the collector, but to reduce his commission from 4% to $2\frac{1}{2}\%$. The unfortunate Gregory's salary was to be reduced to £100.

In July 1829, the managers appointed two standing committees: The library committee to deal with all matters relating to the library and the general purpose committee. The latter was to superintend the porters, the running of the house, repairs, apparatus, lectures and all matters not referred to special committees or the library committee. In accordance with the recommendations of the committee of enquiry, a list of apparatus was duly prepared and presented to the managers. Also, the supplement to the library catalogue was completed and the managers decided to send copies of the catalogue and supplement to the Royal Society, the Antiquarian Society, the Geological Society, the Astronomical Society, the Royal College of Physicians, the Royal College of Surgeons and the Royal Institution.

After the report of the committee of enquiry, the activities of the Institution seem to have continued on a fairly even keel. One event, which was to have important effects, was the appointment of William Tite²⁷ to the post of honorary secretary, a post formerly held by Samuel Luck Kent. Tite had been a member of the committee of enquiry and he was to become the longest serving secretary the London Institution ever had,

Early in 1830, the managers decided that, as the number of people applying for annual membership was small, this class of subscription should be discontinued. Annual subscribers were first admitted in 1820

27. See p. 188.

in the hope that they would provide a useful source of income but the amount thus brought in was never very great, the highest was £127-1-0, in 1823.

According to the 1830 report, a total of £762-6-0 had been obtained by selling the shares held by the board, as recommended by the committee of enquiry. The following year, the sale of shares realised just over £400. The managers proposed to sell a further four shares bringing the total sold to 55. After this, they did not propose to sell any more for the time being" because there is no longer any occasion for this extraordinary income, not does it appear desirable to further increase the number of proprietors."²⁸ Exactly what the thinking was behind this remarkable statement is impossible to decide. What is also surprising is that the proprietors seem to have let it pass without comment.

With the money obtained from the sale of shares, the board was able to purchase £1,000 in exchequer bonds to form the basis of a fund intended to meet any demand for increased expenditure. This purchase was justified in 1839 when extensive repairs to the building had to be undertaken. A new sewage system had been constructed in the neighbourhood which had caused changes in the surface soil. As a result, the foundations of the inner walls and piers had to be underpinned and carried down to the same level as the main walls. This work was paid for by the sale of £1,000 in exchequer bills.

As well as being unwilling to allow the numbers of proprietors to be increased, the managers decided, in 1832, that tighter control should be exercised on those admitted to the Institution's premises.

28. Annual Report for 1831.

Up to this time, the transferable tickets had taken the form of ivory tickets but many of these had been lost or defaced and it had become "impossible to connect the numbers of the ivory tickets with the shares which they represented".²⁹ They were therefore to be replaced by bronze medals.

When the audit committee had a special meeting on 8 October 1840 to enquire into the possibility of engaging a professor of natural philosophy, they investigated the financial situation over the previous eight years. They found that, although income still exceeded expenditure, the income was gradually decreasing because the number of proprietors was decreasing. In 1833 there had been 922 proprietors, whereas in 1840, there were 904. Some shares were sold in the late 1840's and early 1850's but the number of shares held by the board must have been considerable because 91 were sold in 1853. The numbers sold then fell again although some were selling at £5 in 1862. According to the 1865 report, a total of 62 shares were disposed of between 1854 and 1864, whereas the average number of proprietors who resigned or died was 15 each year, which left a large number of shares unsold. When the proprietors' committee was formed after the 1865 annual meeting, the sale of shares was stopped as the proprietors were afraid that the managers would sell them to persons supporting the proposed merger with the City of London College.

After this, no mention was made of the price of shares until 1874, when the managers were able to report that the demand for shares was high, at five guineas each, only about ten remaining unsold, "and there seems every probability that the board will soon be unable to entertain any

29. Annual Report for 1831.

further applications for proprietary privileges".³⁰ The following year, no more shares were available, the managers had had to turn down applications for shares and by 1876 had been able to raise the price to eight guineas. In addition, they had decided to reintroduce on an experimental basis for one year, the class of annual subscribers in accordance with the Charter. So far there were 33 annual subscribers and the board planned to continue the issue of subscribers' tickets, provided that the value of the shares was not affected.

By July 1876, the price of shares had risen to ten guineas and these had been sold by Christmas of that year. After that, proprietors disposing of their shares had obtained twelve guineas for them and by the time the 1877 annual report was written, the board had been offered fourteen guineas for two more lapsed shares. The number of annual subscribers had increased and stood at 101 and the future looked promising. The City of London College in 1877 offered to lease the vacant land at the back of the Institution's building but the managers, obviously looking forward to prosperity and expansion, declined the offer, as "tending to check the legitimate development of the Institution."³¹

In 1878, the price of shares was twenty guineas and in the middle of that year, a share was sold for 25 guineas. In the same year, the managers decided that the numbers using the Institution had to be limited and they therefore decided to allow no more than 300 annual subscribers and to raise the subscription to $2\frac{1}{2}$ guineas. This had no effect in reducing the demand for tickets and so they raised the subscription to three

30. Annual Report for 1874.

31. Annual Report for 1877.

guineas and at the same time started a new class of annual subscription at two guineas which gave admittance to the library but not to lectures. The attempt to raise the subscription of the first group of subscribers was not a success. It showed that ". . . the maximum subscription cannot advantageously be put higher than $2\frac{1}{2}$ guineas to which it the board have accordingly returned. . . ",³² and had involved the Institution in a slight loss of revenue. However, in 1880, the managers were able to report that ". . . already £300 per annum is derived from subscribers who have no admission to lectures and who are in most cases attracted mainly by the circulating library."³³

This trend seems to have continued and in their 1882 report, the managers say, "The board also have to report a large increase in the receipts from subscribers who do not attend lectures, which far outbalances the diminution in those from subscribers who do attend them and from lecture ticket holders."³⁴ This suggests that the original annual subscribers had joined because they wanted to use the library and when the new class of subscriber started, they changed to the new subscription. In other words, the library was the attraction rather than the lectures.

In 1883, six shares were sold for ten guineas each. Why the price should have fallen is not clear. Perhaps the annual subscription was beginning to look more attractive than paying a high price for a share. The price of shares remained at 10 guineas until 1886 when it went up to 12 guineas. The number of annual subscribers continued to increase. There were 470 of them at the end of 1886 and by 1889 their numbers had grown

32. Annual Report for 1879.

33. Annual Report for 1880.

34. Annual Report for 1882.

to 551, when the board decided to raise the subscription rates from $2\frac{1}{2}$ guineas and 2 guineas to 3 guineas and $2\frac{1}{2}$ guineas respectively. After this, the number of annual subscribers declined slowly but steadily. Perhaps it became more attractive to purchase a share after the subscriptions increased because, in 1890, five shares were sold for £20 each.

By 1903 the price of shares had risen again and the managers reported that they had sold six lapsed shares for £106 and two shares that had lapsed later had been sold for £25 each. Two years later, fourteen lapsed shares were sold at 12 guineas per share. The last share sale that is recorded was in 1907 for ten guineas. By the time the Institution virtually closed in 1912, the number of annual subscribers had fallen to 73.

However, in 1865, the Institution discovered a new source of income. The managers held a special meeting on 28 February 1865, when they read a letter from the Hunterian Society,³⁵ asking that the Society's library be housed at the Institution. The society had to move out of its rooms in Aldermanbury and as Alfred Smee,³⁶ the president of the Society was also

35. The Hunterian Society had been founded in 1819. Sir William Blizard, an original proprietor of the L.I., was its first president and he also chose its name. The early meetings were held in St. Mary Axe but in 1820 the society moved to accommodation in Aldermanbury. Also in 1820, its library was formed so that the Fellows could consult current literature and borrow books free of charge. The society remained in Aldermanbury until the move to the L.I. After leaving the L.I. in 1912 the society was without accommodation and the books (about 4,000 of them) were put into packing cases. The books were offered to the Royal Society of Medicine but were declined. Eventually most of them were donated to Cambridge University Library.

During and after the 1914 - 18 war, the society's fortunes declined. The council approached the Medical Society of London with a view to amalgamation but this was rejected by the Fellows and a new council elected. It was decided to start "dinner meetings" to attract new members. Four of these are now held each year. The Society holds its Annual Debate in the Apothecaries Hall. Its Annual Lecture is given by a distinguished speaker from Britain or abroad, and its Annual Dinner is held as near as possible to John Hunter's birthday (13 Feb.) The library was refounded in 1929.

36. See p.

a manager of the Institution, the request for accommodation was made to the Institution.

The general purpose committee decided that the Society's books and bookcases could be put in the pamphlet room and that the Hunterian Society was to pay any cost involved. Proprietors of the London Institution were to have access to the books and they were also to have admission to the Society's lectures in the theatre.

The arrangements worked well for about twenty years until, in 1887, the managers of the London Institution decided that the Institution no longer had room for the Society's library but that if the council of the Hunterian Society wished to continue to hold meetings at the Institution, the managers would be glad to provide rooms. Eventually, after discussion, it was decided that space could be found for the Society's library in the apparatus room. The general arrangement was that the Society paid two guineas for the use of the theatre and one guinea for the use of any of the other rooms. They also paid the officers of the Institution for any additional duties that had to perform on behalf of the Society. In 1895, this arrangement was altered slightly so that the Society paid £30 yearly to the Institution, rather than paying the Institution's officers.

Although the Hunterian Society was the first organisation to be based in the London Institution building, other groups soon followed. The 1878 report informed the proprietors that the theatre had been used by the National Union of Elementary Teachers³⁷ and the Conference of Librarians³⁸.

37. The National Union of Elementary Teachers was founded in 1870. In 1889 the word 'elementary' was dropped from its title.

38. Organised by W.B. Nicholson. See p.105.

The Institute of Bankers³⁹ also agreed to pay £100 per year for the use of the theatre for ten or twelve meetings during the winter season and the use of the council room on the same evenings. In July 1884 this arrangement was altered so that the Institute of Bankers held a maximum of ten meetings in the theatre, for which it paid £50 per annum.

In 1893, the University Extension Society⁴⁰ used the theatre for five lectures, paying two guineas on each occasion. Later in the same year, the Royal Geographical Society⁴¹ was granted the use of the theatre for the delivery of twelve lectures at a charge of twelve guineas.

Almost a year later, in August 1894, the Ruskin Society was allowed the use of the committee room for five nights at a fee of one guinea per night. Later in the year, the London and Middlesex Archaeological Society⁴², sought permission to hold its council meetings (nine or ten each year) in the board room of the Institution, to hold its annual meeting in the theatre and to store its library which amounted to about 200 volumes. The application was granted. At the same meeting, the managers agreed that the University Extension Society should be allowed to hold six meetings in the committee room at a charge of one guinea for each meeting. The City of London Entomological Society⁴³ also held some its meetings at the Institution and stored its library in the basement.

39. Institute of Bankers, founded in 1879 to provide an educational foundation for a banking career and information on banking developments to its members.

40. The first University Extension activities in London started in 1876, when the Society for the Extension of University Teaching organised courses. This arrangement continued until the reorganisation of London University in 1901, when the provision of Extension courses in the London area was made the responsibility of the Extension Board of London University.

41. At this period the R.G.S. had no large lecture hall of its own and so usually used the hall of London University for its meetings although, on occasion, it used other halls. In 1893, 1894, 1895 series of lectures by Halford J. Mackinder were arranged in addition to the Society's ordinary meetings and it is probable that these were given in the L.I. theatre.

42. London and Middlesex Archaeological Society was founded in 1855. It had previously had headquarters in various places, including Fleet St., University College and Bedford Place. Prior to moving to the L.I. it had premises in Dane's Inn. The Society left the L.I. in 1911 and moved to

In 1895, the managers came to an agreement with the London and Middlesex Archaeological Society, which was to pay £20 per year for the use of the theatre or board room for twelve meetings yearly and storage space for its library.

The only other society which made regular use of the Institution's building was the Institute of Marine Engineers⁴⁴ which in 1903 requested the use of the theatre for six meetings during the winter and the use of the committee room on one or two other evenings. The managers decided to charge three guineas for the theatre and one guinea for the committee room.

The previous year, in May 1902, the managers had decided that they would hire the theatre for public meetings for four guineas but whether any such meetings were ever held is not recorded.

All these societies using the Institution's premises provided a useful source of income. However, the place must have been getting a little overcrowded as in 1904, the managers were forced to refuse accommodation to Essex Education Committee which wanted "permanent quarters in London near Liverpool Street Station."⁴⁵ The committee decided that it would need a board room to hold about 60 persons, a small committee room, and possibly, four additional rooms. After discussion, the managers had to refuse the request as it could not afford the rooms.

A similar situation arose in 1905 when, on 15 September, the managers received a letter from the Royal Medical and Chirurgical Society asking

42. (cont.) the Bishopsgate Institute where it still has its headquarters.

43. Founded in 1858 as the Haggerstone Entomological Society, it became the City of London Entomological and Nat.Hist.Soc. in 1887. In 1914 it merged with the

44. Founded in 1889 to promote scientific development of all aspects of marine engineering.

45. Managers' Minutes, 11 May, 1904.

43. (cont.) North London Natural History Society to form the London Nat.Hist. Soc.

whether from 5,000 to 10,000 volumes from their medical library could be deposited at the Institution, but the request had to be declined as there was nowhere to accommodate the books.

When, in 1877, the managers turned down the City of London College's request to lease the land at the rear of the Institution building on the grounds that it might interfere with the expansion of the Institution, they obviously visualised a splendid future for the Institution. Unfortunately these visions were not to be realised. One of the main reasons for the Institution's difficulties in its final years was the tremendous expense incurred in repairing the building. Over the years, a new sewage system and an underground railway had been constructed in the neighbourhood with the result that the drainage of the surface had been radically altered. This caused movement in the foundations of the building - the first indications of this appeared in the 1830s and necessitated the underpinning of the theatre that was done in 1839.

Further major repairs became necessary in 1886 when the old drains had to be replaced. While this was being done, the heating system for the theatre had been found to be in a dangerous state and was replaced by a low-pressure hot-water system. During these improvements it had been observed that the wooden piles on which the walls of the theatre had rotted away and it was necessary to put in new foundations in concrete and brickwork. In addition, the ventilation of the theatre had been improved. The cost of these repairs was £1,659-8-0.

In 1889, alterations and extensions to the building⁴⁶ had been completed at a cost of £3,695. The money was raised on debentures to the value of £4,750, bearing 4% interest, the loan to be for 30 years and to be repaid

46. See p.79.

by drawings commencing ten years from the date of debenture. Alterations to the seating in the theatre had cost over £300 and the rest of the hot-air heating system had had to be replaced at a cost of £223-15-0.

A voluntary subscription was set up among the proprietors and subscribers and in the 1897 report it was announced that £690-8-0 had been promised. The next year it was announced that £760-10-0 had been raised by the appeal. The managers had hoped for £2,000.

The 1897 report made gloomy reading. Further extensive repairs were needed at an estimated cost of £3,425-6-4. In order to finance these repairs, the managers decided to pay off the debentures, which had a high rate of interest and instead arranged with the Alliance Assurance Company to advance £7,500 at 3½% to be secured by a mortgage on the freehold of the London Institution. Of this sum, £6,000 was to be used to pay off the debentures and £2,500 would be used to meet part of the cost of the repairs.

The entire £7,500 was to be paid over 30 years by half-yearly instalments of £196-12-6, with the option to pay the whole at an earlier date. The new method would be less onerous and, ultimately, save money. The proprietors agreed to the new arrangement.

In 1903, legal opinion was sought from R.B. Haldane⁴⁷ and S.A.P. Rowlatt as to whether the whole or part of the Institution's property could be sold, whether the board or the proprietors in general could authorise the sale of further shares and at what price and whether the £20,000 funds could be invested to bring in a better interest. Opinion was that no property could be sold, that further shares could be sold and that the funds could

47. Richard Burdon Haldane (1856 - 1928), later Lord Haldane, who was chairman of the Royal Commission on University Education in London. See pp204-206.

be invested as provided by the Trust Investment Act of 1889.

In 1907, it was reported that £500 was needed to make the library floor safe and when the building was taken over in 1912, a grant of £25,000 was needed to carry out repairs and to provide additional accommodation for the School of Oriental Studies.

The main difficulty experienced when assessing the Institution's financial position over the years is the lack of complete balance sheets. All that is available are lists of income and expenditure with no account taken of the Institution's assets, so that the true state of affairs is not always easy to ascertain.

However, having started its life with a capital of over £80,000, the managers seem, at first, to have exercised little control over the way money was spent and vast sums were spent on the library, in particular. When, in 1812, they realised that expenditure was exceeding income, their economies seemed to be directed towards trivialities rather than major items.⁴⁸

The managers then sanctioned the purchase of the King's Arms Yard premises, which turned out to be unsuited to the Institution's purposes, and which were later sold⁴⁹ at a lower price⁵⁰. After this, the Finsbury Circus premises turned out to be more expensive to build than had been anticipated, but once the Institution was settled into its own building and was launched on a programme of lectures, matters seemed to have continued despite a few hitches, in a reasonably uneventful fashion for many years. It was not until extensions were made to the building in 1888, that the

48. See p.26.

49. See p.56.

50. See p.67.

Institution ran into debt, when debentures were issued to cover the cost.⁵¹
Previously, repairs had been paid for by the sale of exchequer bonds which had been purchased to pay for such eventualities.⁵²

It was the location of the building, on rather spongy soil, that at last brought about the Institution's downfall. It caused extra expense during the erection of the building, and extensive and expensive underpinning of the building in 1839, after a new sewage system had been constructed, causing changes in the surface soil. Finally, in the 1890s, drastic repairs were necessary because there had been movement in the foundations. These had been caused by a variety of underground changes - new drainage systems, construction of the underground railway and vibration caused by trains - which could not possibly have been foreseen in 1815 when the Institution acquired the land but which led to the property being heavily mortgaged to pay for the damage caused.⁵³.

51. See p.78
52. See p.40.
53. See p.79.

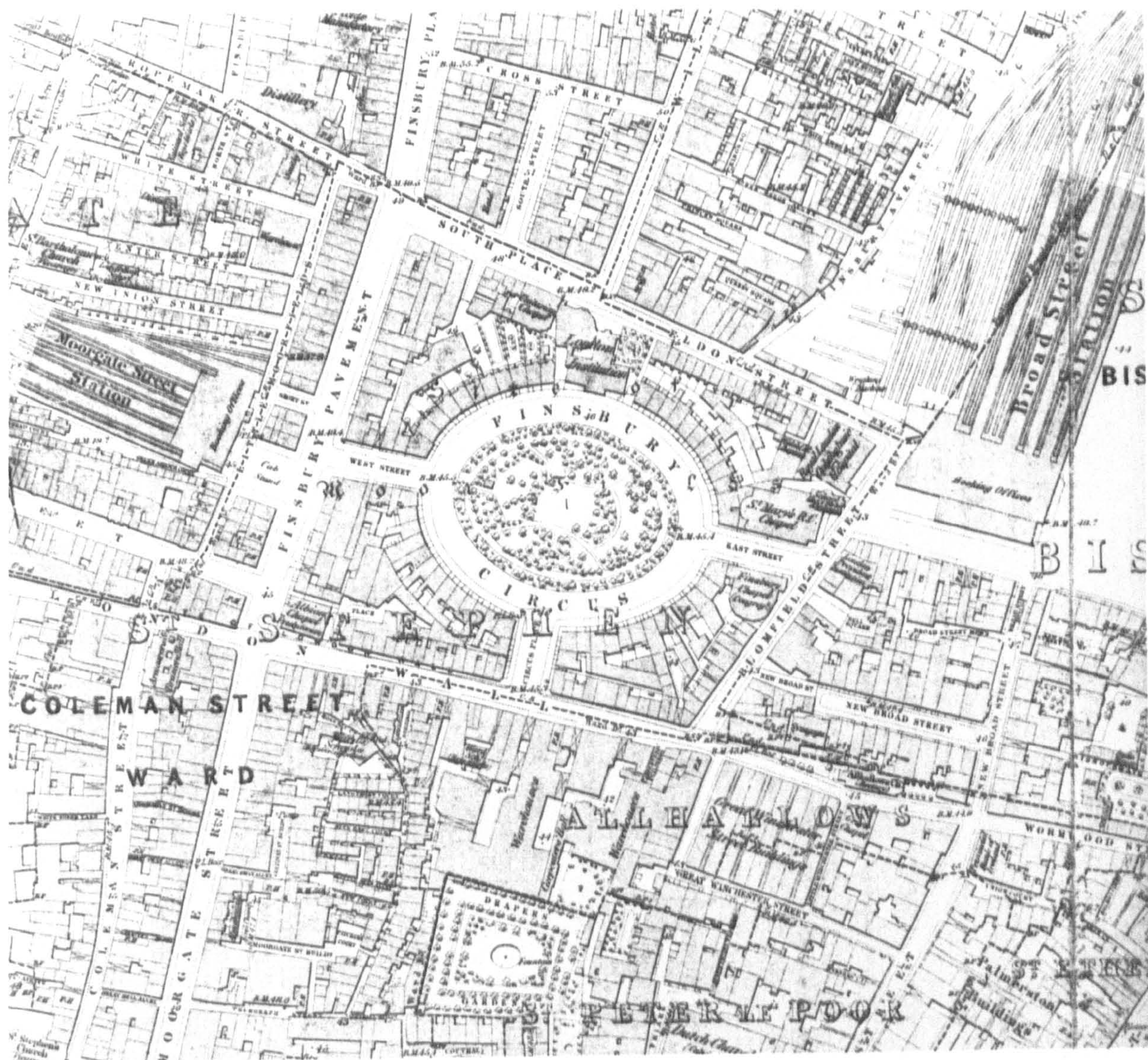


Plate III. Map of the London Institute, Finsbury Circus and its surroundings.

(from the first (c.1870) edition of the 25 inch Ordnance Survey.)

Chapter 3.The Institution's Premises.

The early meetings of the Institution were held at the London Tavern, in Bishopsgate Within, where, at the first meeting of the temporary management committee, a sub-committee was formed to look for suitable temporary premises as well as for a suitable situation for a permanent establishment.

On 18 July 1805, this accommodation committee was authorised to come to an agreement with the owners of number 8, Old Jewry, if reasonable terms could be arranged and the premises were in sufficiently good repair. By 10 December the managers were informed that the house provided, "very convenient temporary accommodation for the library and reading rooms, though not for the lectures".¹ The rent was £300 a year and the premises would be ready for occupation by 1 January 1806. The accommodation committee asked for £1,500 for furniture and for any repairs that were necessary. The house that the committee had chosen, 8, Old Jewry, had originally been built by Sir Robert Clayton in 1671 and was noted for a fine staircase painted by Thornhill.

The first meeting of the managers at the new premises was held on 7 January 1806, when the committee was informed that the library and reading rooms would be open to proprietors and subscribers on Saturday, 18 January and that a few days' notice would be given in the public press.

Meanwhile, the accommodation committee was continuing its search for suitable permanent accommodation. A short note at the end of the minutes of the committee meeting of 23 January 1806 asked "whether it might be

1. Minutes of Temporary Committee of Managers, 10 December, 1805.

advisable to make any application to the City for the site of Blackwell Hall",² and on 18 March the committee minutes recorded that a draft of a memorial to the Court of Common Council had again been read and agreed to. The committee meeting of 3 April was adjourned to the Guildhall to attend the presentation of this memorial to the Court of Common Council. The next positive move came when the Institution's solicitor reported that the Committee of City Lands had agreed to recommend that the Court of Common Council might treat with the Institution for part of the site of Blackwell Hall.³ This was on 4 February 1807. One month later, an official statement from the Court of Common Council was read to the managers informing them that the Court confirmed the report of the Committee of City Lands but that it was referred back to this committee to decide terms on which the site could be granted. Nine months later, Messrs. Woods and Bosanquet, who were both members of the accommodation committee, reported that they had seen the Committee of City Lands and had been informed that the Committee expected a ground rent of £800 per year for the part of Blackwell Hall that they proposed to grant to the London Institution. The managers decided that the Institution could not afford this and so the accommodation committee was to continue its search for suitable accommodation and report back to the managers.

Early in 1808, the committee was considering property in Tokenhouse Yard but after taking legal advice decided to do nothing further about it.

2. Minutes of Temporary Committee of Managers, 23 December, 1805.

3. Blackwell Hall was near the Guildhall, on the east side of Guildhall Yard. The earliest mention of it was in 1356 and it seems from c.1400 onwards to have been used as a market place for woollen cloth. It was rebuilt at the end of the 16th century. This building was burnt down in the Great Fire of 1666 and the Hall was rebuilt in 1672. It was demolished in 1820 to make way for new Law Courts at Guildhall.

They also looked at property in King's Arms Yard but it was found that there were difficulties with the freehold and so further consideration was deferred. On 7 December 1808, it was reported to the managers that " the centre of the ground in Moor Field might in all probability be obtained on very eligible terms from the City"⁴. The managers met on 13 December to consider this and decided that the situation was satisfactory. At the next monthly meeting it was decided that Vandercom, the Institution's solicitor, should prepare a petition to the Court of Common Council for a site in Moorfields.

Not until 1810 are there reports of serious efforts to obtain a suitable room for lectures. The secretary, Samuel Woods, was to find out if there were suitable accommodation at the London Tavern and on what terms. He later reported that he had seen Mr. Hale of the London Tavern and had been told that the ball-room could be used for lectures during winter evenings at a cost of £15 per night. Evidently the managers thought this to be too expensive as no further mention was made of it and no lectures were given there.

In July 1810, the managers decided to ask the Grocers' Company, the owners of the Old Jewry premises, for a lease of at least 31 years for the whole of the Old Jewry building. On investigation it was found that the Grocers' terms were too high, so the Institution tried to obtain a five or seven years' lease instead but this was refused.

At the managers' meeting on 10 January 1811, the accommodation committee was authorised to complete the purchase of the property in King's Arms Yard, which had been looked at earlier, for £7,000. The following month, the committee reported that the purchase had been completed.

4. Minutes of Committee of Managers, 7 December, 1808.

The deeds were committed to the care of Mr. Vandercom, the solicitor, and the management committee was specially convened to affix the Seal of the London Institution to the bond of indemnity and the deed of covenant. Unfortunately, the president had left his key to the box in which the seal was kept at his home at Clapham, so the sealing had to wait until the following day.

The managers' report to the proprietors on 25 April 1811, stated that the purchase of the premises in King's Arms Yard had been completed and were held on lease from the Mercers' Company. There were 28 years of the lease to run at a rent of £40 per year. The premises were described as "a large and commodious mansion and warehouses" and on the north side, "a freehold yard and stables" with sufficient space for the erection of "lecture rooms and other necessary buildings".⁵

The expenses involved were:

Altering house for library, reading rooms, etc.£2,000

Erection of lecture room and other buildings£7,000

Also desirable to purchase "contiguous property" . . . £4,000 or
£5,000

This sum, about £14,000, was more than the present disposable balance and, since the library and apparatus were still not complete, more money was needed before such an outlay would be possible. It was also difficult to make an accurate estimate of the running expenses of the building because of increasing rates and taxes.

Money difficulties apart, the premises were not ideal. The main building was on the left hand side of the street and contained a hall,

5. Annual Report for 1811.

the pamphlet room and the committee room on the ground floor. There were three reading rooms on the first floor and above these were the principal librarian's apartments. The other house crossed the end of the street and consisted of the newspaper room on the ground floor with three very long floors over it, "extending the entire spaces of both houses, which were formed into galleries lined with cases for the larger portion of the books."⁶

The move to the new premises was made in August 1811. There was more delay in opening the library than had been expected but the new apartments were ready for use on 24 February 1812. It soon became clear that the new premises were not suitable. In their report of 6 March 1812, the visitors viewed with concern "the darkness, narrowness and lowness of all the rooms of the library", and felt that the rooms were ill-suited for "the reception of so valuable and extensive a collection". Having the reading rooms separate from the library was inconvenient and some of these rooms were also dark and small. There was no lecture room, nor a room for the proprietors' meetings. The visitors' committee was of the opinion that the premises could not be regarded as the Institution's permanent situation, not only for the reasons they had already given, but also because the approach to them by carriage was very inconvenient and, finally, the premises were partly freehold and partly leasehold. In order to obtain better access on foot to the new premises, it was decided to lease one of the houses in Tokenhouse Yard and, by 12 May, Samuel Woods, the secretary, was able to inform the managers that he had obtained the lease of 20, Tokenhouse Yard for £160, plus £25 for fixtures.

6. Visitors' Report, 1812.

On 13 August 1812, the managers learned that an Act of Parliament⁷ empowering the City to build on Moorfields had been obtained. It was resolved that Joseph Woods, surveyor and proprietor, should examine the plans and report what extent of front, depth and back would be necessary for a suitable site for the Institution's purposes. George Hibbert, the president, was to negotiate for a suitable plot of ground in Moorfields. By 25 August, he had received the surveyor's report on the amount of land needed for the Institution and so had written to the Committee for the Improvement of Central London asking for "a piece of land in the centre of the northern half of the intended London Amphitheatre (later to be called Finsbury Circus) containing 88 feet in front and of such depth and bounded by such diverging lines as are shown in the plan exhibited by the Corporation and also a piece of ground at the back of the former containing 90 feet of frontage towards the street (Eldon Street)."⁸ He did not offer precise terms because he hoped that "an establishment so respectable and important"⁹ as the London Institution, could be granted favourable terms.

Despite the wholesale resignation of the managers after the report of the committee of enquiry of 1812, the new managers who met on 3 October 1812 did not allow any delay in negotiations for the proposed site. At their first meeting they appointed a committee of six to meet the City Lands

7. An Act enabling the Mayor and Commonalty and Citizens of the City of London to improve and grant Building Leases of the Ground in Moorfields; also to sell all the Ground comprised in such Leases when improved, and to apply the Produce thereof towards increasing the Orphans Fund. (52 Geo. 3 cap.210)
8. Managers' Minutes, 25 August, 1812. See Plate I for map of area.
9. Managers' Minutes, 25 August, 1812.

Committee. On 16 October, the Institution was offered a piece of ground, as described in Hibbert's letter of 25 August, for the sum of £105-10-0 per year, for a term of not less than 61 years, subject to the Committee's approval of the elevation of the proposed building. At a special meeting of the managers on 26 November 1812, it was decided to accept this offer. The Institution wanted two years in which to build and to have the land during that time at a peppercorn rent, to which the City Lands Committee agreed. The managers also decided that the sub-committee which had been appointed to confer with the City Lands Committee should be instructed to obtain a plan and an estimate of an edifice suitable for the Institution's purposes.

This sub-committee reported to the managers on 11 February 1813. It seems that they were no longer entirely sure that the Moorfields ground would be suitable for the Institution, mainly because they had thought that the City intended to construct streets reasonably soon; but it now appeared that all the Committee was doing at that time was letting off parcels of land and the making of the roads was "postponed to a period of time which cannot be calculated."¹⁰ Presumably the construction of roads depended upon how soon the buildings in the area were completed. The committee, therefore, turned its attention to other situations. They looked at the house in Old Jewry, which the Institution had previously occupied, Mr. Raikes' house¹¹ which had been offered to them, Founders' Hall,¹² Salvadore House,¹³ and Blackwell Hall¹⁴. They objected to the house in

10. Managers' Minutes, 25 August, 1812.

11. Job Matthew Raikes, an original proprietor and former manager, had offered his house and grounds in Alderman's Walk to the Institution.

12. Situated at the northern end of Founders' Court, Lothbury, it was built in 1531 and destroyed by fire in 1666. It was rebuilt and let as a dissenting chapel called Founders' Hall Chapel. In 1845 it was again rebuilt and leased to the Electric Telegraph Company and later occupied by the G.P.O. The Hall, now in Swithin's Lane, was rebuilt in 1877.

13. An office building in Bishopsgate St. Gilbert Scott was in the office of James Edmeston here from 1827 to 1831.

Old Jewry because part of the front premises had been let on lease and because rent for the whole of the premises would be about £1,000 per year.

Mr. Raikes' house was unsuitable because access to it was even more difficult than to the premises which they now occupied. The Founders' Hall, which, even if it had been free, would have been a questionable situation, had lately been purchased by the Bank for its own use. Salvadore House was not in the market and neither was Blackwell Hall.

The search for accommodation for the lectures proved equally frustrating. The rooms that the committee investigated were too small, too expensive or otherwise unsuitable. A special general meeting of proprietors held on 14 August 1812 agreed that the managers should give orders for the erection of a temporary lecture-room, not exceeding £1,500 and also to enquire about engaging professors and lecturers. The committee itself was hopeful that "in the course of a few more years, the Committee for City Lands will have ground to dispose of in more eligible situations than is at present offered, and that the London Institution will always be received as a welcome tenant."¹⁵

Another special general meeting was called on 3 November 1813, when two schemes were put before the proprietors. The first was based on the resolution of 14 August, since when the managers had found that the cost of erecting a lecture theatre to hold 700 in King's Arms Yard would be £1440. The second plan arose from an offer made by the Grocers' Company to the managers. This consisted of a 62 year lease on the entire premises which the Institution had previously occupied in Old Jewry. The managers calculated that the repair of the house and the erection of a lecture theatre and laboratory would cost about £6,000, or about £10,000 if the house were rebuilt.

14. See p.54.

15. Managers' Minutes, 11 February, 1813.

When the vote was taken, both schemes were rejected.

By the time the 1814 report was presented, the board was still trying to obtain property, either freehold or on a long lease and had negotiated for several freehold properties but without success, "because of the reluctance which has too often been manifested by proprietors to contribute a sufficient sum to enable the board to go to market".¹⁶ On another occasion, the managers recalled, when suitable freehold premises were available, the matter was put to a general court of proprietors" who seem not to have realised the real value of the premises, or their suitability for the Institution",¹⁷ and who decided on an adjournment for three months to consider the matter. Unfortunately, in the meantime, the premises had gone to a higher bid and so when the adjourned meeting came there was nothing to discuss. However, the board was determined to make "one more effort . . . in order to fulfill their own duty and to give the proprietors an opportunity of fulfilling theirs."¹⁸

As far as the land in Moorfields was concerned, a plot had previously been offered to the Institution, leasehold at 100 guineas per year for sixty years but a general court of proprietors, specially convened to consider this on 4 March 1813, had decided to ask the City to keep the option open for two years, if possible, so that the board could think up a plan to obtain funds. Not surprisingly, the City refused to do this. However, at special general meeting held on 6 April 1815, the proprietors were told that the land in Moorfields was now being offered for a sum which, it was hoped, would not exceed £1,500. This, the managers said, had been

16. Annual Report for 1814.

17. Ibid.

18. Ibid.

accomplished " through the liberality and activity of the Committee for the Improvement of City Lands", which had encountered many difficulties in accommodating themselves to the managers' wishes. The board recommended the purchase to the proprietors and also " to appropriate the proposed definite ways and means, calculated at about £15,000 to the purchase of such freehold estate and to the erection of a permanent and ornamental hall or college, as far as the said sum will apply".¹⁹ It was assumed that, once the Institution was established in its own building, "additional resources" would become available to erect a lecture theatre and laboratory.

Typically, the meeting was adjourned for two weeks for further discussion of the report. A brief description of the proposed site and its dimensions, together with the official report of the plan and the cost of executing it, were to be seen at the Institution for four days before the adjourned general meeting. This meeting agreed to the board's proposals over the freehold land so the board was at last enabled to enter negotiations to purchase it. The terms were: a lease for 61 years at £100 per year, commencing from midsummer 1817, of a piece of ground on the north side of Moorfields, 88 feet wide in front towards the proposed Circus,²⁰ and 124 feet wide at the back, opposite Wilson Street. The Institution's building was to be "erected within the space of five years, of an elevation in front consistent with the character and importance of a public building."²¹ Upon completion, the Corporation agreed to assign the freehold to the Institution for £1,500.

19. Minutes of special general meeting, 6 April, 1815.

20. Finsbury Circus was laid out c1814, probably by William Montague (N. Pevsner, London (The Buildings of England)).

21. Minutes of adjourned General Meeting 20 April, 1815.

When this arrangement had been agreed, the sum fixed for the cost of the building and the description of the site and building drawn up, an advertisement was issued, inviting architects to send in designs on or before 1 June 1815, with a prize of 100 guineas for the one considered the most suitable. It was specified that the building should be lit by gas and heated by warm air, and that it must be possible to erect the theatre completely separate from the main building, so that it could be erected, later, if necessary. Fifteen plans were received but none was entirely satisfactory to the board. William Brooks' design²² was considered the best, although it was received "upon the condition of his altering it and enlarging it so as to meet the entire sanction of the managers, and also furnishing a new series of drawings with another specification."²³ At the same time, the Corporation was asked to allow more space at the front line of the intended site, so that the facade of the building could be extended and to separate it from adjoining property," so as to give it additional ornament and reduce fire risk."²⁴ The City granted the request and the Institution received an additional grant of land equal to half the original amount without any increase in the original terms.

The architect of the new building, William Brooks (1787 - 1867),²⁵ had been a pupil of D.T. Roper and had entered the Royal Academy School in 1808. His favourite architectural style was classical and he had considerable talent for interior arrangement and decoration, using colour

22. See Plate I for Brooks' competition drawing. See Plate II for Brooks' competition drawing and facade of building. Also, Country Life 11 April 1936 for a description and photograph of the building.

23. Preface to volume I of Library Catalogue, 1835

24. Ibid.

25. See: H.M. Colvin, Biographical Dictionary of English Architects, 1660 - 1830; Obituary in Gent. Mag. 1868 N.S. Vol V. p.254.

very skilfully. Unfortunately, he seems to have been rather a difficult person to work with. Outside his profession he was an earnest nonconformist, an enthusiastic supporter of the abolition of slavery, a friend of Wilberforce and a promoter of the Bible Society. His son, C.W. Shirley Brooks, was the second editor of Punch and gave three lectures at the Institution in the 1862 - 3 lecture season.

Nine estimates were received for the building and the contract went to Thomas Cubitt (1788 - 1855)²⁶, who submitted the lowest tender: £22,000 for the mansion and £4,000 for the theatre. This was Cubitt's first major undertaking and, instead of the usual practice of sub-contracting the trades of bricklayer, plumber, carpenter and so on, he employed these craftsmen himself. His first large task had been the re-roofing of the Russell Institution in Great Coram Street. Shortly after completing the London Institution contract, he erected large workshops for himself in Gray's Inn Road and was the first to undertake house building in all its various branches. In 1824 he built houses in Upper Woburn Place, Woburn Buildings, Gordon Square, Tavistock, Gordon and Endsleigh Streets and part of Euston Square. The following year, he erected Belgrave Square and Lowndes Square, among other projects. Later, he was consulted by the Queen on alterations at Osborne, where he designed and constructed the new Royal residence.

He was interested in the improvement of sewage disposal and wrote a pamphlet on the subject in 1843. He also took great pains to stop smoke nuisance from large chimneys. In addition, he constructed about 3,000 feet of the Thames Embankment. The preparation of the Building Act owed much to him. He also undertook, gratuitously, the negotiation for the purchase of property at Brompton on behalf of the Commissioners of the 1851

26. See: Hermione Hobhouse, Thomas Cubitt, Master Builder., D.N.B.

Exhibition and was one of those who guaranteed a sum of money when the success of the Exhibition seemed doubtful.

In 1839, he joined the Institute of Civil Engineers and contributed two papers to their Proceedings - Experiments on the Strength of Iron Girders and Experiments on the Strength of Brick and Tile Arches.

Although Cubitt's estimate was the lowest received by the managers for the new building, they had hoped that the cost of the building would not exceed £20,000 for both the mansion and the theatre but by omitting some of the features of the building, for example, the observatory, the estimated cost was reduced to £18,470.

Having been without a suitable building since 1805 and having also quibbled about the site in Moorfields for two years, the managers now wanted the new building at once. Penalty clauses for non-completion on time were written into the contract: the shell of the building was to be completed on or before 25 October 1816, for which Cubitt was bound to the sum of £500, while he was bound to the sum of £1,000 to complete the building on or before 9 September 1817. Even though he did not succeed in doing this, he was not penalised by the managers as the main cause of delay was Brooks' failure to supply drawings and specifications on time.

Owing to dissension among the proprietors about the cost of the new building, delays in signing the contracts occurred, with the result that they were not ready by the time the managers wanted the foundation stone laid. This was laid on Saturday, 4 November 1815, by the Lord Mayor, the Rt.Hon. Samuel Birch, while the seal of the Institution was not put on to the contracts until 9 January 1816 at a special board meeting which was also attended by Brooks and Cubitt.

The inscription on the foundation stone was composed by the Rev. John Russell, M.A., Master of Charterhouse. Inside a specially prepared cavity in the stone was placed a glass bottle containing a vellum scroll with a brief account of the origin and objects of the Institution and the names of the managers and others who had enabled these objects to be realised, together with various gold and silver medals and coins. The cavity was covered with a brass plate with a copy of the inscription on it. After the laying of the stone, the party proceeded to the ballroom of the London Tavern to hear the inaugural address given by Charles Butler, standing counsel of the Institution, in which he spoke of the benefits that science and commerce conferred upon each other, and expressed the hope that the Gresham lectures²⁷ might be transferred to the Institution. This speech was followed by supper when the party was entertained by a song specially written for the occasion and numerous speeches and toasts.

Meanwhile, the managers were considering how best to reduce the cost of the new building. A meeting of the board on 9 October 1815, heard a report from a chairman of the building committee giving a list of deductions, delivered by Cubitt to the building committee, which he thought could be made without altering the general plan and elevation of the building. This list included a saving of £250 by having wood pilasters instead of scagliola and £450 by having crown glass in the windows instead of plate glass. There were various other small items but the main savings were to be made in reducing the depth of the buildings by 10 feet, thus saving £1,600; omitting the attics and observatory, £2,000 and saving £1,600 by making alterations (not specified) in the construction of the theatre.

27. See p. 15 and pp. 145-150

In addition, by omitting the stone facings from both back and front of the building, a further £3,000 could be saved. Altogether, Cubitt reckoned, about £7,000 could be saved, not including the item of the stone facings. A special meeting of the managers was held on 24 November 1815, in which the managers questioned Brooks and Cubitt as to what savings might be made by omitting the observatory, the lecture-room and the portico and also what it might cost to add these features at a later date.

The managers decided that the funds available for completing the building were: floating capital, £3,500; the sale of the house in King's Arms Yard, estimated by Joseph Woods at £6,000; £16,666 in 3% consols to be liberated by the proprietors, bringing in £10,000; making a total of £19,500. They also estimated that the purchase of the ground in Moorfields, legal expenses and removal expenses would be about £4,000; that the cost of building the mansion and library would amount to £20,000; also, that it was desirable to complete the lecture theatre which would cost £4,000, making a total expenditure of £24,000. Therefore, an additional sum of £4,500 was needed. If consols to the value of £8,166 beyond the amount already decided upon were sold, a reduction of £244 would be made in the Institution's annual income.

They had, unfortunately, reckoned without the "loose, spongy and unsafe" nature of the soil of Moorfields. This was discovered when the foundations were being dug and so the footings of the walls had had to be widened and deepened, increasing the cost by £350. The managers were informed of this at a special meeting on 30 December 1815. The news precipitated a further flurry of calculation after which the managers that, taking into consideration the various savings that could be made, it would cost £20,605 to have mansion and lecture theatre built and

£18,105 if the lecture theatre were not built. An additional reduction of £1,500 could be made by sacrificing the ashlar facing and having stucco instead.

A special meeting of proprietors was held on 28 January 1816, when they were informed of some of these possible economies, including omitting the attics and observatory, having a stucco front instead of Portland stone, and the alterations to the construction of the theatre and laboratory. However, the managers felt an "insuperable objection" to having stucco instead of Portland stone but the attic storey should be omitted. Since it had been the original intention to have the officer's apartments on this floor, space for them had to be found elsewhere and they were to be situated over the main staircase,

The managers were faced with the problem of raising money to pay for the new building.²⁸ In the meantime, work on the edifice continued and on 11 September 1817, they were informed that, although the building should have been finished by the previous Tuesday (9 September), it would require another two months' work to complete it. By 11 December 1817, the managers had decided to affix the seal to the contract with Cubitt for erecting the theatre, which was done on 12 March 1818. At the same meeting it was decided to request the solicitor to represent to the City of London Improvement Committee that the Moorfields premises were now nearing completion and that the City should attend to the agreed paving as soon as possible. He was also requested to point out the necessity of watching and lighting that part of the City.

28. See pp. 28-30

On 9 July 1818, the managers were informed that the new library was ready to receive the books. At this meeting it was decided that an apparatus, made by the firm of J & P. Taylor (later Taylor and Martineau) for the manufacture of gas by the decomposition of oil,²⁹ be ordered for lighting the Institution. It was thought that, by having the gas-making plant on the premises, they would be in control of it and not paying out to a gas company for more gas than had been used. Unfortunately, this proved to be an error of judgement.

The apparatus was expensive to run, because, not only did it have to be fuelled and maintained in working order but somebody had to be employed to operate it. It was also troublesome and as early as 1822 some of the pipes had to be repaired. By 1827 considerable expense had been incurred trying to stop the offensive smell given off by the gas pipes. This smell also caused annoyance to the Institution's neighbours. In October 1828, the managers received a letter from a Mr. Guest, complaining that the smell of the gas prevented him from obtaining tenants for the adjoining houses. He threatened legal proceedings if the trouble were not remedied.

Following the gloomy annual report of 1829, the proprietors recommended

29. This had been invented by John Frederic Daniell, F.R.S. (1790 - 1845) He was interested in meteorology and was the inventor of "Daniell's hygrometer" In 1824 he wrote an essay entitled Climate considered with reference to Horticulture which was published in the Horticultural Society's Transactions, and which revolutionised hothouse management. In 1831 he became Professor of Chemistry in King's College London and in 1836 was awarded the Copley Medal for his invention of the Daniell cell. He was elected an honorary member of the L.I. in March 1828 and in 1837 - 8 gave a series of lectures on Electrochemistry at the Institution. References to gas plant D.S.B. Vol. 3 p556. Also J.F. Daniell, Elements of Meteorology 3rd edition, Memoir of Daniell pxvi - xvii.

the immediate discontinuance of the gas-plant and suggested an arrangement with one of the established gas companies. At a special meeting of the board of managers on 28 May 1829, the secretary reported that the Chartered Gas Company was willing to try the experiment of lighting the Institution for a week. At the August monthly meeting, the managers decided to appoint a committee to come to an arrangement with the Chartered Gas Company on the price for which the Institution could be lighted. The committee was also to find someone to remove the oil and put the gas apparatus into a safe state. The following month, this committee reported that they had arranged with a Mr. Lowe who would undertake to clear all the oil and leave the gas plant safe for £1 and that the Chartered Gas Company would base their charge on the gas consumption registered by the meter at the end of the year but that they would undertake that it would not exceed £275 per year.

By September 1830, it was decided that the gas-plant was no longer necessary because the Chartered Gas Company had given satisfaction with the lighting of the building and so, since the ironwork of the plant was now corroded and in poor repair, the general purpose committee was instructed to dispose of the apparatus, gasometer and everything connected with it as they thought best. Before they could do so, however, a complaint was received on 25 November 1830 that gas residuum was escaping into the sewers. The honorary secretary was instructed to write to the Clerk to the Commissioners of Sewers that such a nuisance could not possibly occur again. The apparatus was eventually sold for £48-9-8d.

Details of the Building

The front of the building³⁰ was faced with Portland stone and had a

30. See Plate II.

central portico which was based on the design of the Temple of Vesta at Tivoli. The portico itself was supported by columns of the Corinthian order and was ornamented with wreaths of flowers. The lower part of the portico was supported by columns in the Greek Doric style. The building was separated from the adjoining properties by two wings of masonry, each of which contained a door; the door in the eastern wing led into a private passage to Wilson Street and the one in the west wing originally gave access to the gasworks of the Institution.

The ceiling of the entrance hall was supported by eight Ionic columns of Bath stone which had the capitals picked out in red. The newspaper room, which led off the main hall had a fireplace of black marble and porphyry scagliola which was set off by buff walls, white ceiling and cream-coloured pillars. Glazed doors separated the main staircase from the hall and the staircase was lighted by a large window "of ground glass, in three compartments; each division being surrounded by a bright ruby-coloured border of the same material."³¹ Here, the walls were coloured porphyry red up to the level of the window sills, with green and white above. The staircase led up to an octagon, giving access to the lecture theatre, and then divided so that a double staircase went up to the gallery which led to the library.³² The library occupied the whole of the first floor. It was 97 feet long, 42 feet wide and 28 feet high. It was an irregular octagon in shape, with the long sides being divided into thirteen recesses formed by bookcases. At either end was a fireplace flanked by Corinthian columns. A gallery ran right round the room.

31. Britton and Pugin, Illustrations of Public Buildings of London, p.190

32. See Plate III.

The lecture theatre³³ was modelled closely on that of the Royal Institution and held about 700 people. It was lighted and ventilated by a large circular lantern which could be blacked out if necessary by "a false ceiling sliding down the lantern, which, passing the windows, darkens the room."³⁴ Behind the lecture-table was a fireplace which could accommodate a portable furnace and above this was an opening between two columns "for receiving transparencies, or a screen for the exhibition of the Phantasmagoria."³⁵

The laboratory³⁶ and apparatus rooms were behind the lecture room. The laboratory was designed by W.H. Pepys and its equivalent included an air-furnace, a sand heater, a retort furnace, a low grate to accommodate a portable furnace and a large copper still. The main furnaces were fitted with iron dampers to regulate the draught and were covered with a broad hood to carry off fumes. The apparatus room was lighted by an oblong lantern and housed the models and apparatus belonging to the Institution, and which formed "a very distinguished feature of the establishment."³⁶

Alterations and Extensions.

Very few alterations were carried out on the building in the early years. An exception is the extra access from Eldon Street, which was constructed by Cubitt, in 1823, although some major repairs were necessary, particularly in 1839, when the internal walls of the building had to be underpinned.

A threat to remove the Institution altogether first appeared in December 1860, when the managers held a special meeting at which they

33. See Plate III.

34. Britton & Pugin, pl92.

35. Preface to Vol. I of the Library Catalogue. 1835.

36. See Plate IV.

37. Britton & Pugin, p.192.

received a notice from the Metropolitan Railway announcing an application to Parliament for the construction of a general railway terminus in Finsbury Circus. The managers decided that a reply should be sent objecting to the scheme. Further consideration of the matter came at another special meeting on 21 January 1861, when the subject of the railway's approach to Finsbury Circus was discussed and the nature and extent of the proposed alterations were explained to the board by the honorary secretary, together with an account of the way in which they would affect the Institution. The solicitor was also present at this meeting to explain the nature of the bill, called 'The Finsbury Circus Railway Station Bill' and it was decided that he should be asked to watch the progress of the bill. and report on the matter from time to time. A special board would be summoned as soon as it was necessary in the interests of the Institution. On 13 February 1861, the managers resolved that, "It is the opinion of this meeting that the introduction of a railroad into Finsbury Circus is calculated to prejudice very seriously the interests of the London Institution. This invaluable library, which has been formed with the greatest care and expense, comprising 80,000 volumes, is consulted by a very large number of persons and any interference with Finsbury Circus would be of great injury to science and literature, and that a petition to the above affect be prepared by the solicitor, under the authority of the library committee, and presented to the House of Lords."³⁸ At the next monthly meeting, on 13 March, the solicitor reported that the Finsbury Circus Railway Terminus Bill was withdrawn on the tenth of that month, after the presentation of the petition by Lord Derby.

At the 1861 annual meeting, the managers were able to report that,

38. Managers' Minutes, 13 February, 1861.

"The proprietors must be aware that, for several months past, a project has been in active agitation for converting the whole of Finsbury Circus, including the edifice and the site of the London Institution into a general railway terminus. Without attempting to regard the merits of the main question, the first thought of the managers was to defend the interests of the proprietors and to preserve the local permanency of this, an establishment which they are well assured had rendered real and substantial services to both literature and science. Under these impressions, the managers directed that a memorial should be prepared and sent to the House of Lords and the progress of the bill carefully watched, that the recent withdrawal of the measure renders any further remark unnecessary."³⁹

There matters rested until November 1862, when the managers were informed that the Great Eastern Railway was intending to proceed once more with its scheme for having a terminus in Finsbury Circus. At the following monthly meeting it was resolved to record dissent should any application be made by the Great Eastern Railway to take over the London Institution. In January 1863, the managers appointed a sub-committee to confer with the railway company to find out what they intended to do in the neighbourhood of Finsbury Circus and the meetings were to be attended by the Institution's solicitor. This sub-committee reported to the managers on 11 February, when it was resolved that the petition to Parliament that the committee had prepared should have the seal of the Institution fixed to it and that the solicitor should deposit it in the private bill office. On 11 March, it was reported to the Managers that the petition had been sealed and presented to the House of Lords by Lord Derby and that the Great Eastern Railway bill had been postponed.

Later in the year, in November, it was decided that the solicitor should keep a close watch on any move on the part of the railways which might affect the Institution, so that the board could receive information as early as possible. Two months later, he reported that three of the proposed new railway lines would pass through the garden of Finsbury Circus. The managers therefore decided to prepare a petition opposing the railway lines and affix the seal to it. On 10 February 1864, the solicitor reported that the London Low Level railway had not passed Standing Orders, that the Metropolitan Extension had done so and that the London Main Trunk Lines would be before the Committee on Standing Orders on the following Friday. At the next monthly meeting, the solicitor reported that the Metropolitan Extension was to be the only line to proceed. It was originally to have been in an open cutting but it was now proposed to use the 'cut and cover' method. The rails would be 21 feet below street level and the gardens would be restored when the line had been constructed. He also reported that the following Tuesday was the last day for petitioning. In April, the solicitor reported to the managers that, "The City of London had determined to avail itself of the assistance of the Institution in the matter of the railways and he had undertaken to furnish them with information and witnesses."⁴⁰

At the July monthly meeting, the solicitor reported that the parliamentary committee had reported in favour of the Metropolitan Railway Extension Bill but they had directed that special clauses should be inserted to protect the garden. The managers resolved that the solicitor be instructed to attend the committee of the House of Lords and to report to the general purpose committee as to the steps he thought necessary to protect the interests

40. Managers' Minutes, 13 April, 1864.

of the Institution.

After this, the problem of the railways disappears from the managers' minute books and the annual reports. Presumably, adequate safeguards were made because the Metropolitan Railway built its City line. The Great Eastern Railway, on the other hand, dropped its plans for a terminus in Finsbury Circus and built it at Liverpool Street instead.

For over 50 years, the Institution's building fulfilled its purpose with few alterations. However, by 1878, the managers felt that it was time that the accommodation offered by the building was improved. The library was becoming increasingly popular, attendance at lectures was good and the Institution was prosperous. All the shares were sold and the number of annual subscribers was rising. In particular, the circulating library needed extra space and a separate workroom for the librarians was desirable. Both the newsroom and pamphlet room were too small and there was no adequate writing room. Cloakroom and lavatory accommodation were in need of improvement and, finally, a coffee room was an "obvious" need.

The board had considered the requirements and plans had been drawn up to build on most of the vacant ground facing Eldon Street. The cost of the alterations, including fittings and the architect's commission, was expected to be about £13,000, which would be raised by the sale of part of the funded stock. The increased running costs resulting from the larger premises would be met by the issue of annual subscribers' tickets and additional lectures accommodation for 300 persons had accordingly been planned. A special general meeting was called and proprietors had the opportunity to see the plans of the proposed alterations prior to this meeting, at which the proposals were rejected. There is no record of any discussion which may have taken place and no reason is given for the rejection.

Before this, however, attempts had been made to improve conditions in the building. Complaints had been made about the ventilation, especially in the lecture theatre and the pamphlet room. Ventilation in the former was improved in 1877 by the removal of parliamentary papers which were stored in the theatre, blocking the air-ducts. In the pamphlet room, it was effected by using burners to create an up-draught.

In 1884, additional exits were made from the lecture theatre (it sounds as if they were mainly intended as emergency exits) one of which led into the garden and from there into the outdoor passage along the side of the Institution's ground into Eldon Street at the back, or Finsbury Circus at the front. The other went through the laboratory - which suggests that very little apparatus or scientific activity was to be encountered there - direct into Eldon Street. The doors all opened outwards and were to be unlocked before the theatre was opened and would remain so until the audience had left the building.

In 1886 it became necessary to replace the old drains, when it was found that the wooden piles on which the walls of the theatre rested had rotted away and it was necessary to put in new foundations in concrete and brickwork.⁴¹ Also, the old heating equipment was found to be in dangerous state and was replaced by a new low-pressure hot water system. In addition, the ventilation of the theatre was improved. In 1893, a new heating system, using low-pressure hot water, was installed in the reference library, hall and reading room.⁴² (Presumably the heating system of the theatre was separate from that of the main building since it was erected later.)

The question of extensions to the building was raised once more in 1877,

41. See p.48

42. See p.48

when the managers consulted Messrs. Davis and Emmanuel, architects. Their report was presented to the proprietors at a special general meeting on 29 July 1887. The plans included extensions to the library, enlarging the newsroom, improving the cloakroom and lavatory accommodation, erecting a smoking room on the vacant land on the east side of the Institution, where light refreshments might be served, constructing a new outlet to Eldon Street and making improvements to the theatre itself.

By the time the 1888 report was presented, the managers had invited tenders for the work. Messrs. Ashby Bros. of Union Court, Old Broad Street had contracted to carry out the work for £3,857 and work had already started. The board proposed to raise a sum not exceeding £5,000 by the issue of debentures and a circular had already been sent to proprietors inviting them to take them up.⁴³

Having spent so much on the improvement of the building, the managers felt unable to recommend any further alterations for the time being, although the seating in the theatre was not considered satisfactory. The seats had no backs and in 1874 an experiment had been tried to fit backs but had been unsuccessful. In 1890, the managers expressed their fears that putting backs on to the seats would drastically reduce the seating accommodation available to the extent that "even the addition of a gallery would only provide a very limited amount of extra accommodation."⁴⁴ Alternative plans involved structural alterations to the theatre at high cost, which the board did not recommend. The seats in the theatre were only 24 inches from back to back and the various schemes for making them wider with more leg-room necessitated the loss of a number of seats.

43. See p.49

44. Annual Report for 1890

The plan eventually carried out was to make the seats two feet six inches from back to back, the seats were lowered to a uniform height of eighteen inches above the platform and fitted with a solid pine back $17\frac{1}{2}$ inches high. At the same time, the cushions were reupholstered and to help pay for this and the alterations to the seats, the board proposed to issue the five remaining debentures left from 1888.

Extensive repairs to the fabric of the building became necessary in 1897, as follows: part of the parapet wall of the roof needed to be rebuilt; part of the stone coping had to be replaced; a general repair of roofs and gutters was necessary; and the flank walls needed to be rendered in cement. In addition to the outside repairs, work was needed on parts of the floors which had sunk, possibly because of the vibration and drainage of the sub-soil caused by the railway. It was also found that the main staircase was unsafe, that some of the stonework had decayed, that the ventilation of the drains was defective and that the paintwork had perished and woodwork begun to rot. The cost of these repairs came to over £3,000 and so the managers decided to arrange a mortgage on the property.

The following year, the managers announced that the theatre had been fitted with electric light and points for electrical experiments. Two years later, in 1901, electric light was installed in the committee room at a cost of £19, half of which was paid by the Hunterian Society and a further two years later, it was put into the hall and newsroom at a cost of £30-4-0d.

Having been informed in 1903 that none of the Institution's property could be sold,⁴⁵ the managers had to consider what to do for the future of

45. See p.49

the Institution. In 1905, a special subcommittee was formed to discuss how the desperate situation in which the Institution found itself could be improved. Among other suggestions, the board was asked to find a qualified architect who would prepare, at his own risk, plans for the better utilisation of the site. Four architects submitted plans for the board's consideration and on 8 May 1907 a scheme prepared by T.P. Figgis, F.R.I.B.A. and A. Needham Wilson, A.R.I.B.A. for reconstructing and enlarging the premises of the Institution and for increasing its income was placed before the proprietors. This plan proposed, among other things, that the reference library should be divided into a number of rooms, an idea to which many proprietors objected. The alterations proposed for the library were described as "vandalism" and the library ought to remain unaltered because it was "second to none in beauty of proportions and fitness for literary work. Redecorated, refurnished and relighted, it would certainly be the equal of any reading room in the kingdom."⁴⁶

The scheme was therefore withdrawn at an adjourned meeting of the proprietors on 5 June 1907, when it was unanimously agreed that the Institution should be rebuilt or reconstructed so that the income could be increased by the better use of the surplus ground and also that alternative schemes should be prepared, one for retaining the present building with as little modification as possible and the other for rebuilding entirely. Figgis and Wilson were invited to prepare a revised scheme which would meet proprietors' objections and Mr. William Stewart, F.R.I.B.A. was invited to reconsider his plans, "certain features whereof had prevented

46. Letter to The Times from Sidney H. Burchell, 22 April, 1907.

his scheme from receiving the favourable consideration of a majority of the board and the special committee."⁴⁷

In the meantime, questions had arisen as to the condition of the building. Figgis and Wilson reported that they thought it necessary to move the theatre to the site of the octagonal hall and main staircase because the vacant land could then be developed more readily, access to the theatre could be made more convenient and the entrances to it made to suit the London County Council's requirements. The main staircase needed extensive repair and at the time had temporary supports beneath it. The floor of the library needed £500 spending on it to make it safe. Mr. Arnold Mitchell, F.R.I.B.A. reported that at various times the walls of the building had settled to a greater or lesser extent and this had thrown considerable strain on the library floor. He was of the opinion that "the movements of a large audience thereon would almost certainly result in disaster."⁴⁸

The managers and sub-committee then decided to obtain the opinion of the eminent architect, Sir Aston Webb,⁴⁹ on the state of the building and the feasibility of the proposed schemes. He reported that both the external and internal walls were sound as also was the brick vaulting which carried the ground floor. The front retaining wall was showing signs of movement and the outside walls of the staircase were in an unsatisfactory state although there were no signs of recent movement. The theatre walls, which had been underpinned in 1886, showed no serious movement. Extensive repairs were needed to the main staircase and the roof of the main building and the

47. Report of Board on Revised Schemes for Reconstruction or Rebuilding, 13 March, 1908.

48. Ibid.

walls of the new smoking room (built in 1888), which had not been taken down to a secure foundation were in a bad condition. Sir Aston agreed that the library floor was faulty but was adequate for its present use, although it should not be subjected to the weight of a moving crowd. He thought that the floor and roof could be easily strengthened. With regard to the general state of the building, Webb reported that, "although the building is not free from structural defects and is somewhat old fashioned in its construction and arrangement, it is in a very fair state for the time it has been built and bearing in mind the excellent quality of the original work, it would probably last for many years if undisturbed."⁵⁰ He also felt that Figgis and Wilson's scheme for modifying the building would entail almost complete rebuilding, leaving only the stone front wall and the main flanking walls. The proprietors were reminded that, "a crisis has now been reached in the position of the Institution. The expenditure of a considerable sum of money is imperative for urgent repairs. In the event of the proprietors abstaining from a decisive vote or action tending to place the affairs of the Institution on a secure basis, interference from outside will almost certainly result."⁵¹ The board recommended the proprietors to vote for the scheme to rebuild the Institution, which they did. Unfortunately, as the proprietors were informed at the 1909 general meeting, the board had invited tenders but none had been forthcoming.

The "interference from outside" that the managers feared took the form of the Royal commission on University Education in London, with Lord Haldane as chairman. Early in 1909 the managers placed papers relating

49. Sir Aston Webb (1849 - 1930), architect who designed several important public buildings including the main part of the Victoria and Albert Museum (1891), the Royal College of Science (1900 - 1906), Admiralty Arch (1911) and the eastern facade of Buckingham Palace (1913). (DNB)

50. Report on Revised Schemes for Reconstruction or Rebuilding, 13 March, 1908.

51. Ibid.

to the history, scope and work of the Institution, together with a description of the schemes for alteration or rebuilding, before the Commissioners.⁵²

When the commission reported in 1912, it recommended that the Institution's building should be used to house a School of Oriental Languages of London University. A grant of £25,000 from the Treasury enabled repairs and alterations to be carried out. These included the construction of a fireproof floor in the library, the removal of part of the main staircase, so that only the left-hand flight remained and the erection of a new wing facing Eldon Street, which contained classrooms and a lecture room to accommodate 100 persons. The School remained in Finsbury Circus until 1933, when it was offered a site at Bloomsbury. Negotiations started for the sale of the Finsbury Circus building, which was finally agreed for the sum of £219,000. The building was demolished in 1936.

The site is now occupied by an office block. There is a bronze plaque on the wall which records that the London Institution and the School of Oriental Studies formerly occupied the site.

The difficulties that the managers of the Institution had in the early days of finding suitable permanent premises⁵³ probably meant that some of the initial enthusiasm had evaporated by the time the Finsbury Circus building was ready for occupation. Nevertheless, once these premises were in use, the managers set about arranging a lecture programme which, with the changes in pattern that took place over the years, was generally successful.

52. No correspondence relating to the Commission seems to have survived or, at any rate, are not in the Public Record Office, so it is not known why the Commission thought the Institution should be within its purview. See also p.204.

53. See p.53-62.

The Finsbury Circus edifice was built on a lavish scale, despite financial problems and must have presented an impressive sight. The first floor of the building housed the most important feature of the Institution, the library, the contents of which had formed the main item of expenditure in the years before 1812.

The rest of the building was equally well-suited to the purposes of the Institution, with a committee room, pamphlet and news rooms and a lecture theatre capable of holding up to 700 people. It was soundly constructed and still had many years' useful life ahead of it when Sir Aston Webb reported on its condition in 1908.⁵⁴

It therefore appears clear that the managers chose their architect and builder wisely but were unfortunate in their choice of site.

54. See p.81-82.

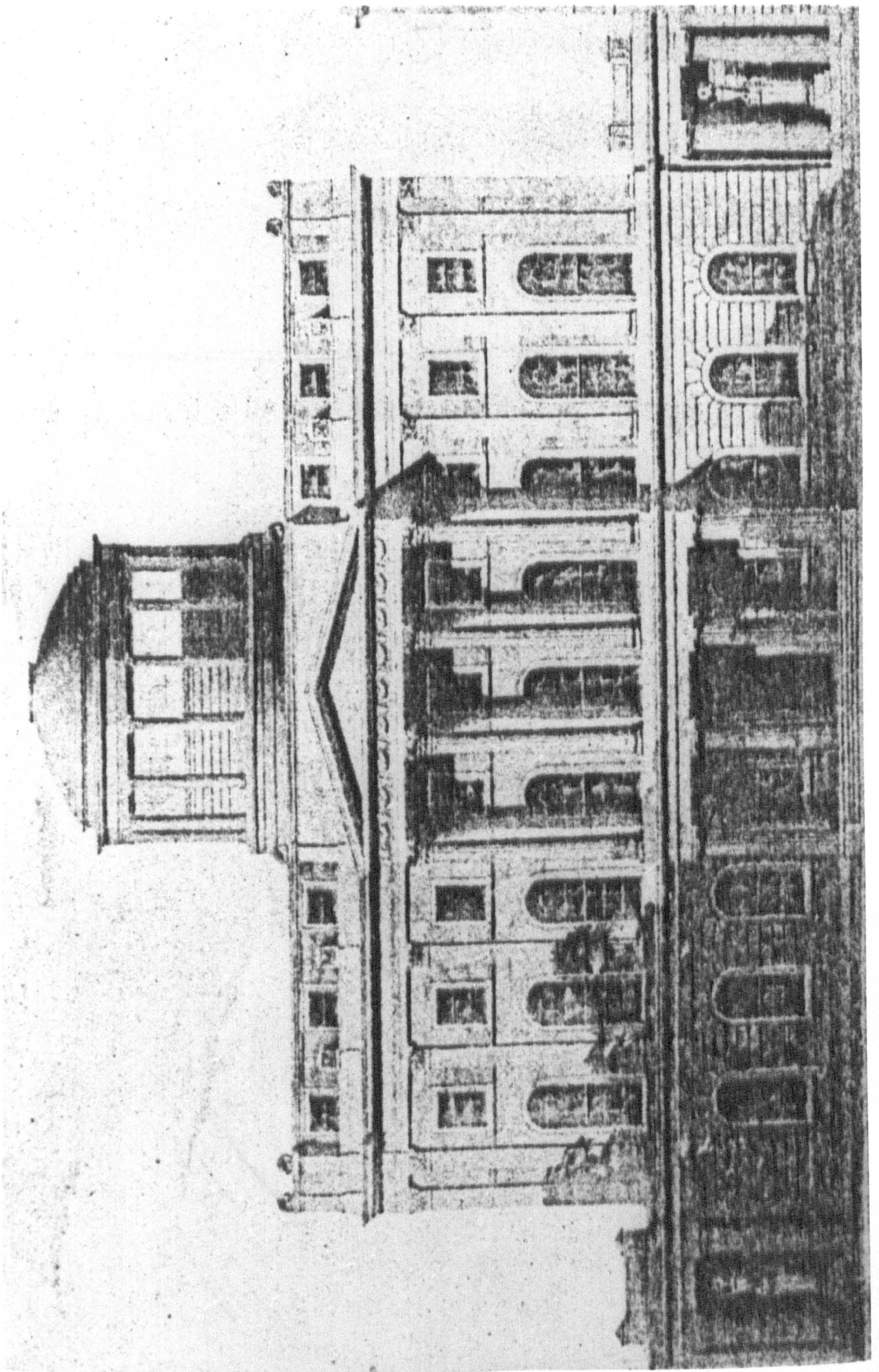


Plate IV. William Brooks' competition drawing, showing the observatory, which could not be built because of the cost.

Chapter 4.

The Library.

In accordance with the aims of the Institution which included the foundation of a library, the temporary committee of managers, at their first meeting on 11 June 1805, set up a sub-committee which was to be responsible for buying books. Purchases were to be made in public sales only, books of "unquestionable scarcity, value and merit"¹ were to be obtained and the sub-committee was authorised to spend £1,000. By December 1805, the book committee had exceeded this sum, having paid out £1,852-19-0 and was asking for more money because "numerous and valuable libraries are now upon the eve of being offered to the public."² A further sum of £5,000 was granted.

John and Arthur Arch,³ booksellers and stationers of Cornhill, under the direction of the book committee and Samuel Woods, the honorary secretary, were employed to obtain the required books. Unfortunately, the acquisition of foreign books was difficult because of the war on the continent. The sale which contributed most to the setting up of the library was that of the Hon. William Petty,⁴ 1st Marquis of Lansdowne and Earl of Shelburne, which started on 6 January 1806.

Among the rare books obtained were the first four folios of Shakespeare (purchased for £62-9-6d), a first edition of "Paradise Lost" and a number of incunabula. Besides buying rare books, the aim was to have a good selection of books on British History, literature and biography, as well

1. Minutes of Temporary Committee of Managers, 11 June, 1805.

2. Ibid. 10 December, 1805.

3. An original proprietor of the Institution. See Appendix I.

4. William Petty (1737 - 1805), Statesman. Patron of literature and fine arts.

as English antiquities and topography.⁵ It was not considered so important that the theology, law and medicine sections should be as extensive, as people wishing to study these subjects could use the libraries of Sion College, the Inns of Court and the Colleges of Physicians and Surgeons. (Presumably, those interested in these subjects would, it was thought, be members of the appropriate body.)

As well as being responsible for the purchase of books, the sub-committee was authorised, on 7 January 1806, to engage a binder and to provide suitable accommodation for him at the Institution. The following month, the managers decided that the book-committee should decide what assistance was needed in the library, draw up a list of duties of the principal librarian and sub-librarian and the salaries to be offered and then report to the managers. This report was duly presented on 15 April 1806, when the managers were also informed that two applications had been received for the post of assistant librarian and five for that of principal librarian. Among the applicants for the latter post was Richard Porson, whom the book committee recommended should be appointed. The managers accordingly agreed to this and also appointed William Upcott to the post of assistant librarian.

Richard Porson (1759 - 1808)⁶ was a Greek scholar, educated at Eton and Cambridge. He was elected to a fellowship of Trinity College in 1782 but lost it in 1792 because he refused to take Holy Orders. At the same time, he failed to obtain a lay fellowship. After this, some of his friends raised a fund to buy him an annuity which brought him about £100 a year.

5. For analysis of books in the 1835 catalogue, see Appendix IV, table 1 and graph 1.

6. D.N.B. ; Gent. Mag. Vol.78 ii, Oct. 1808, p.946 - 950.

He accepted the annuity on condition that the principle, of which he was to receive the interest, should be vested in trustees and returned to the donors at his death. However, the donors refused to have their gifts returned and so the residue of the fund was used to establish the Porson Prize and Porson Scholarship at Cambridge University. On 2 November 1792, he appointed Regius Professor of Greek and although he apparently intended to lecture, never actually did so. After his election to the professorship he continued to live in London, making occasional visits to Cambridge. His health was never good and he seemed unwilling, or unable, to undertake steady work. When he became principal librarian at the London Institution, he received a salary of £200 per annum and a set of rooms at the Institution. Unfortunately, his attendance at the library was irregular and the responsibility of running the library fell on the two sub-librarians, James Ilbery and William Upcott.

James Ilbery had been appointed sub-librarian in January 1806 and left the Institution in March 1813, when the office of second sub-librarian was discontinued on the recommendation of the committee of enquiry. Nothing is known of his career after leaving the Institution.

The other sub-librarian, William Upcott (1779 - 1845)⁷ was an antiquary and autograph collector. When he moved to London from his native Oxfordshire he became a bookseller, first as the assistant of R.H. Evans of Pall Mall and then of John Wright of Piccadilly. In 1833 thieves broke into the Institution building and stole the whole of his collection of gold and silver coins and autographs. More than 500 of the proprietors signed a

7. D.N.B.; The Upcott Collection of Literary Autographs, 1765 - 1830, in the Dept. of Western Manuscripts in the Bodleian Library, Oxford, has recently been made available on microfilm.

request that he be reimbursed from the funds of the Institution and £500 was voted to him. After a disagreement with the managers he resigned from the Institution in May 1834, when he moved to 102, Upper Street, Islington, a house that was known as 'Autograph Cottage'. Upcott took an active part in the publication of the Garrick correspondence and in the preparation of the London Institution's library catalogue. The present Guildhall Library (founded in 1824) is said to have originated in a suggestion from him and in 1828 he superintended the arrangement of the books in it. His library, books, manuscripts, prints and drawings were sold by Sotheby in 1846 and are said to have realised £4,125-17-6d. Many of the autographed letters were bought for the nation and went to the British Museum.

The report of April 1806 which had recommended the appointment of Porson also dealt with the progress of the library. The £5,000 which had been allotted was almost spent and the book committee wanted more money. The managers resolved that a further sum be allocated to the book committee to bring the total to £8,000 and also that the committee be empowered to discharge the current expenses of the reading room for newspapers and periodicals.

On 1 July 1807, the managers received a report from the visitors, which stated that Upcott, the sub-librarian, had reported on the state of the library in the absence of Professor Porson. Several books were reported missing and the committee asked Upcott if he had any idea who had taken them. He replied that he had not, adding that, on former occasions books had been taken but had been returned. However, he thought that these books had been gone a long time and were unlikely to be returned. The managers decided that the library should not be opened unless a librarian were

present and the book committee was asked to consider further security measures. Whatever these measures were, thefts continued and in December 1809 the book committee reported that the problem was serious. It was suggested that the books be placed under lock and key or that some rooms could be locked if not needed to accommodate persons using the library. The thefts were described to the proprietors as happening "with a frequency which seemed almost to assume the character of a system."⁸

After Porson's death in September 1808, William Maltby (1764 - 1854)⁹ was appointed principal librarian on 1 February 1809. Before taking up this appointment he had practised as a solicitor for several years with his elder brother, Roland Maltby, formerly Clerk to the Fishmongers' Company and on the 23 June 1787 he was called to the bar at Gray's Inn. While he was principal librarian, he had to superintend the removal and rearrangement of the library on two occasions: the first was from the Old Jewry premises to the King's Arms Yard accommodation and the second in 1818 to the Finsbury Circus building. He held the post of principal librarian until June 1834, when he retired. He was given the title of 'Honorary Librarian', allowed to occupy his rooms at the Institution and given an allowance of £100 per year. He died on 5 January 1854, within a few days of his 90th birthday. In his Will, he left 300 guineas for the improvement of the library.

On 9 January 1810, the house and book committees reported jointly that, having considered the duties of the clerk and also the advantage of having another librarian, it appeared to be a good idea to combine the

8. Annual Report for 1810.

9. D.N.B. ; The Times, 11 Jan. 1854; Gent. Mag. 1854 i 209 - 10.

office of clerk with that of sub-librarian. It was therefore resolved that another sub-librarian should be appointed as soon as convenient and the clerk, James Savage¹⁰, was dismissed, although the proposed additional sub-librarian was never appointed.

James Savage, an antiquary, born in Yorkshire, had been appointed clerk to the Institution in December 1805. It was he who rescued Porson from the workhouse in St. Martin's Lane to which the latter had been taken after the seizure which preceded his death. After being informed of his impending dismissal, he disappeared from the Institution, taking with him a considerable sum of money. Apparently he had persuaded some people who wished to become proprietors of the Institution to sign transfer notices to him and then made off with the proceeds of some fourteen subscriptions. For some months afterwards, the managers were concerned to receive news of his whereabouts but no information was forthcoming. The Dictionary of National Biography, not surprisingly, makes no mention of this episode in his career but says that after 1820 he spent some time in Taunton, first as amanger of an uncessful Tory newspaper, then as a bookseller and finally as librarian of the Somerset and Taunton Institution. He then moved to Dorchester where for fourteen years he edited the Dorsetshire County Chronicle and Somersetshire Gazette. He finally returned to Taunton and died there on 19 March 1845.

Although the library had had a great deal of money spent on it, it was several years before a catalogue was available. In March 1812, the managers decided that instructions were to be given to prepare a catalogue without delay when the book committee held a special meeting later that month.

10. D.N.B.; Gent. Mag. 1845: 557 - 8.

The 1812 managers' report informed the proprietors that considerable losses were still being sustained in the library, that the printing of a catalogue in alphabetical order had been started and that the purchase of books "excepting such as are necessary to be had and may occur during the progress of the printing of the catalogue will be suspended."¹¹ The catalogue eventually appeared in 1813.

When the financial situation caused the appointment of the committee of enquiry in 1812, the affairs of the library came under close scrutiny. The committee reported that the staff consisted of the principal librarian and two sub-librarians. The duties of the principal librarian included: the classification of the books; the preparation of a catalogue; attendance in the library from 11 a.m. to 3 p.m. on days when it was open, and as many evenings as he could manage; to be present at meetings of the library committee; to make a monthly report to the library committee on the state of the books, especially if there were any missing; to supervise the sub-librarians and to have accommodation in the house of the Institution if it were convenient for him to reside there.

The investigating committee felt that a reduction could be made in the number of librarians employed. The appointments had been made when the Institution was started and the purchase of books was planned to be on a much larger scale than was possible in 1812.¹² A further saving could be made by allowing both remaining librarians to reside on the premises.

William Maltby and James Ilbery gave evidence to the committee and it became clear that when Porson was librarian he carried out very few

11. Annual Report for 1812.

12. See Appendix IV Table I.

of his duties. The total charge of the library, the purchase and arrangement of the books and the preparation of the catalogue were left to the sub-librarians. After Porson's death in 1808, the post was left vacant for nearly four months, thus leaving all responsibility on the sub-librarians, subject to the superintendence of the book committee. Finally, the most important duty, the classification of the books and a correct catalogue, had still not been carried out. The librarians themselves did not know the number of books in the library and there was no way of making an accurate assessment of the books lost, as the books had no distinctive mark either generally or individually. The only way of telling whether a book was lost was by having someone ask for it and not being able to find it, by finding it on sale in a shop or on a stall, or by comparison with the catalogue in the course of its compilation.

Since the Institution's move to King's Arms Yard, the principal librarian had not attended in the library as there was no separate room assigned to him. Any attendance that had been put in had been by the sub-librarians, who had also done some cataloguing, "and, except in the instance of the interleaved catalogue¹³ of the Royal Institution, drawn up for the purpose of comparing the two catalogues together, have been likewise suggested by one of them" (that is, the sub-librarians). The committee said that it was not criticising Maltby, the present librarian, who spent a lot of time selecting and buying books but, the committee pointed out, the purchase of books was the responsibility of the book committee, not the principal librarian.

Initially, the salary of a sub-librarian had been £100 but this

13. No copy appears to have survived.

had been increased to £127-10-0 by an allowance for property tax and an extra £20 per year for doing some duties formerly done by the clerk. The total charge to the Institution for having three librarians was £455 per year. The investigating committee reckoned that this could be reduced to £300 if a principal librarian and one sub-librarian were employed, or £215 if two sub-librarians were employed. The committee was also of the opinion that if only two librarians were employed, they should be "active and efficient officers with such division of duties . . . as may be found expedient", and also that adequate payment should be made to the librarian dismissed as a result of these recommendations.

Finally, the committee recommended that savings be made in the supply of newspapers and journals in the reading room. Twelve daily papers were supplied and twelve evening papers. Several of these were duplicates and a few triplicates and all of them, except the duplicates and triplicates were bound and kept. The committee could see no reason for doing this and incurring heavy expenses for binding. It recommended that three of the dailies should be kept and bound and the rest sold in the evening at half price and the duplicate copies of evening papers discontinued. The evening papers and other journals (except those for binding) should be sold by contract to a newsman who supplied the foreign market.

In an appendix to their report, the committee observed,

"It will appear from a reference to the minutes that notwithstanding the active and personal duties appointed to be performed by the principal librarian. . . Mr. Porson seemed to consider himself as elected chiefly on account of his very superior attainments and reputation and that, under this impression, none of the duties above referred to were habitually or scarcely at any time performed by him."¹⁴

Following the recommendation of the committee of enquiry, the post of second sub-librarian was discontinued and James Ilbery left the Institution on 31 March 1813. He was paid one year's salary for his services.

Since the main preoccupation of the managers between 1815 and 1819 was the new building, very little was heard of the library during those years. Nevertheless, in October 1816, the managers resolved that the library and apparatus committee be requested to consider what measures should be taken to prevent "pillaging of the library"¹⁵ and in what manner the books should periodically be examined by the librarian, a report to be made to the board.

Despite the remarks of the 1812 committee on the necessity for the librarian to be conscientious in his attendance and the need for closer control of book purchases, in June 1820 it was reported to the managers that the attendance of the librarians had become very irregular. They ordered that the library should at no time be left unattended, it being the principal librarian's responsibility to see that this instruction was carried out.

In October 1822, the book committee decided that £400 should be spent each year on books: £150 on old, valuable books and £250 on modern publications, which was an increase on previous years.¹⁶ Also, the principal librarian was to be allowed to spend up to £8 on recently published works, between successive managers' meetings or meetings of the book committee. Any purchase that he made was to be reported to one or other of these committees. The following month, the proportion of the £400 to be spent on old books was increased to £200, thus reducing the

15. Managers' Minutes, 10 October, 1816.

16. See Appendix IV Table I.

amount available for new books to £200. In addition it was to be "left to the discretion of the principal librarian on the occasion of any sale of books of former periods, to purchase such as he may judge to be suitable for the library and to report to the first book committee or board of management."¹⁷ Perhaps this last instruction was interpreted too liberally by the principal librarian. At any rate, in February 1824, it was resolved that, in future, no book should be purchased without the sanction of the board of management or the book committee - a resolution that was not adhered to if the report of the 1829 committee¹⁸ of enquiry is any guide.

This committee found that the purchase of books was insufficiently supervised and the library was irregularly attended. Maltby, the principal librarian, was criticised because he had not made a personal inspection of the books for eleven years, had continued to buy books without the supervision of the book committee and had not made a catalogue. It also disapproved of the arrangement whereby the principal librarian paid £50 from his own salary for an assistant (a practice which dated from the 1812 committee of enquiry's recommendation to have only one sub-librarian). The committee praised the sub-librarian for working so hard in the library without adequate support from the principal librarian but disapproved of his function as book-seller to the Institution. This, the committee said, was "an improper and unbusinesslike method of purchasing books."¹⁹ and should be discontinued.

17. Mins. of Book Committee Meeting, 14 Nov. 1822.

18. See above, p 34

19. Report of 1829 Committee of Enquiry.

After the investigating committee delivered its report, a book committee was formed once more (its existence at the time of the investigation seems to have been purely nominal, which perhaps explains Maltby's failure to consult it), work was started on the production of a supplement to the catalogue but nothing was done immediately about altering the arrangement whereby the principal librarian employed his own assistant. This assistant, Mr. Partington, resigned in November 1832, when it was reported to the managers that Maltby was prepared to nominate somebody else to hold the post. The managers, however, decided the library committee should consider the qualifications and duties of an assistant and have power to sanction any appointment that Maltby made. The outcome of these considerations is not clear, but no immediate appointment seems to have been made.

Following several complaints about the behaviour of Upcott, the sub-librarian, and his household in the house of the Institution, the managers decided to dismiss from their employment. The dismissal was to be from midsummer day 1834 but Upcott wrote to the managers on 30 May 1834, resigning immediately. His resignation was accepted.

On 12 June 1834, the managers asked the library committee to consider the salaries and duties of the Institution's librarians and, in view of Upcott's resignation, whether alterations in the staffing of the library were desirable. Later that month, on 26 June, a special meeting of the managers was informed that Mr. Maltby wished to retire from his post but wanted to keep the rooms which had been built for him. The board decided to accede to these requests.²⁰

Following the library committee's deliberations on the library staffing,

20. See above, p.90

it was decided that, in future, there were to be two librarians, of equal rank and salary (£150 per year), neither of whom was to reside on the premises. The candidates for these posts should be aged between 25 and 45 and should have competent knowledge of the classics, science, history, modern literature and books in general. They should attend alternately in the library, make reports, attend soirees and generally carry out the instructions of the library committee. On 14 August 1834, the managers decided to appoint Edward Brayley and Richard Thomson as joint librarians.

Edward William Brayley (1802 - 1870)²¹ had studied chemistry and had attended Brande's lectures at the Royal Institution. Between 1822 and 1845 he was one of the editors of Annals of Philosophy, the Zoological Journal and Philosophical Magazine. He contributed original papers and notices, chiefly on the subjects of mineralogical chemistry, geology and zoology, together with special communications on igneous meteors and meteorites and a few articles of scientific biography. His most important contribution to geology was a paper on the formation of rock-basins, published in the Philosophical Magazine of 1830. While he was at the London Institution he delivered many lectures and occasionally spoke on geology at the Royal Institution. During the 1867 - 8 lecture season, he gave two lectures on the astronomical researches of the late Earl of Rosse, for which the then Earl allowed him the use of his father's map of the great nebula in Orion, which had not been published at the time. These lectures were also given to the Philosophical Society of Bradford, the Royal Institution, Hull, and the Philosophical and Literary Society of Leeds. He was elected F.R.S. in 1854 and was an original member of the Zoological and Chemical Societies.

Richard Thomson (1794 - 1865)²² was an antiquary and for many years

worked hard for the proper investigation of the antiquities of London. He arranged, classified and illustrated the antiquities found in the excavations for the new Royal Exchange building. He played a considerable part in the preparation of the catalogue of the library and also gave, anonymously, many valuable books to the Institution and left it £500 in his Will.

After the report of the 1829 committee of enquiry, work was started on the preparation of an up-to-date catalogue of the library. The first such catalogue had been the alphabetical one, produced in 1813. Since that time, little or nothing had been done to bring it up to date, until a supplement was printed in 1830. In 1832, the principal librarian informed the managers that a new catalogue was in preparation.

The 1833 report stated that the new catalogue was complete and all that was now necessary was to have it printed, when each proprietor would be presented with a copy. By the following year, the catalogue had still not appeared. The managers reported that they had hoped to have it ready for distribution but the nature and extent of the work had made this impossible. The first volume of the catalogue eventually became available in 1836. The impression consisted of 1,000 copies, 603 of which had been presented to proprietors and 57 to libraries and learned societies. The catalogue had an introduction, written by Upcott, Brayley and Thomson, which included plans of the ground floor and library of the Institution, a general history of the Institution up to 1835, a bibliographical notice of the library and a sketch of the scientific activities and lectures.

21. D.N.B. , Managers' Minutes.

22. D.N.B. , Managers' Minutes.

This was followed by a list of the managers in April 1835, explanatory references to the plans of the Institution and the plan of the library and gallery and finally the table of classified subjects.

It was not possible to issue the second volume containing the catalogue of tracts and pamphlets at the same time, mainly because the managers had decided to reorganise this catalogue completely but they hoped that it would be ready before the next annual meeting. This delay had, they said, led to the important advantage that a large collection of tracts which had been presented to the Institution by its standing counsel, Mr. Serjeant Merewether,²³ could now be included. The collection consisted of 64 volumes containing upwards of 800 tracts and was "extremely valuable as illustrating the history of the Oxford controversies at the beginning of the 18th century,"²⁴

Despite the managers' optimism, the second volume of the catalogue was still not ready by the time the 1839 annual meeting came round. It had been found that one volume was insufficient and that it would have to be issued as two volumes which, it was hoped, would be available during the course of the following year. The first of these was ready by April 1840 but the second did not appear until September 1843. This volume contained a complete alphabetical index of authors and subjects. The librarians were working on a similar index for the collection of tracts but the completion of this was hindered by increased demands made on the librarians' time by the soirees. The library committee had also directed

23. Henry Alworth Merewether (1780 - 1869), was called to the bar in 1809, created Serjeant-at-law in 1827 and became a QC in 1853. He was also Recorder of Reading and Attorney-General to Queen Adelaide. From 1842 to 1859 he was Town Clerk of London.

24. Annual Report for 1836

that the books in the library should be arranged, marked and a manuscript catalogue completed and kept up to date. The managers asked the librarians to take note of which classes of books needed further additions, which would be made as finances permitted.

In the 1849 report, it was explained that no further parts of the library catalogue could be printed while extensive cleaning and repair of the building was going on. However, the catalogue was regularly kept up to date in manuscript form and was available should anyone wish to consult it. The fourth volume of the catalogue was issued in June 1852. It was complete to 1 January 1852 and contained a systematic bibliographic arrangement of all the additions to the library since the issue of the third volume in 1843, to the end of 1851. At the monthly meeting of the managers on 12 August 1852, it was resolved to have a copy of the library catalogue suitably bound and presented to H.M. the Queen for the library at Windsor.

By the time the managers issued the 1854 report, a new difficulty faced the library - that of being unable to accommodate all the new additions that were being made to it. Newly acquired books were therefore being housed in the rooms formerly occupied by the late honorary librarian, Maltby. These rooms had the advantage that they were already fitted with shelves which needed very little repair. At the same time, the managers reported on an experiment to increase the usefulness of the Institution by issuing to every proprietor an additional card of admission to the library and pamphlet room. The scheme, they said, was similar to that at the British Museum and was easier to administer than the bronze medal (which had replaced the ivory ticket, but which caused difficulties when they were lost) because the cards were re-issued each year and so it was easier to keep track

of any that might be mislaid. Many proprietors preferred the card system and it was reported that an increased attendance of readers in the library had been the result.

Because the duties of the librarians had increased to such an extent, mainly because of the increase in the size of the library, it was decided, in 1857, to increase the salary of both librarians, who had been at the Institution for over 22 years, by £25 per year. In addition, Thomson received a gratuity of £50 "in consideration of his attention to the general correspondence of the Institution and especially of all the letters and arrangements relating to the lectures."²⁵

After the death of Thomson in January 1865, a rearrangement of the officers was needed. Brayley was appointed principal librarian, his salary was increased and he was also appointed Professor of Physical Geography. Mr. Henry Thomas Williams who had been employed for the previous eight years by Thomson at his own expense, was appointed sub-librarian and assistant secretary as well as having the circulating library put into his charge and a set of rooms in the house allotted to him.

In February 1870, the death of Brayley was reported to the managers and in the following May they decided that the testimonials of applicants for the post of librarian should be referred to a special committee to examine and report. As far as possible, the qualifications of the new librarian were to be that he should be prepared to reside in the Institution, as he would have the general superintendence of the Institution, should possess scientific attainments and the ability to lecture on some branch of science if required, should have good administrative ability, be competent to superintend the library and well acquainted with the librarian's duties.

Finally, he should not be over fifty years of age.

The special committee recommended that John Cargill Brough be appointed, out of 32 applicants, as principal librarian. It also recommended that two assistant librarians be appointed at a salary of £125 each, without residence. The board accepted these recommendations subject to the conditions that the principal librarian should reside on the premises and undertake the general superintendence of the Institution and that the appointment could be terminated on six months' notice at any time of the year. The two sub-librarians appointed at the same time were Henry Thomas Williams and George Parr.

John Cargill Brough (1834 - 1872)²⁶ suffered from ill-health for most of his life. From 1852 - 1858 he worked in the audit office of the London and South Western Railway but left to establish himself as a writer and editor. He was the author of The Fairy Tales of Science (1858). For ten years, from 1860 to 1870, he edited The Chemist and Druggist and was elected F.C.S. in 1864. In 1867 he started The Laboratory, a weekly record of scientific research but this venture only lasted for six months. He was also editor of several other publications and sub-editor of Nature which he had to relinquish after a short time. While he was at the London Institution he started and edited the Journal of the London Institution which, although specifically stated not to be a monthly production started out by appearing every month. However, it later appeared at longer and longer intervals, finally dwindling to an annual production before disappearing altogether in 1886. When it started, it was intended to give information on the activities of other scientific and literary institutions, reports on lectures

26. F. Boase, Modern English Biography. Obituary in Journal of L.I. , Sept. 1872, Vol.III No.16, p.90-92.

and books as well as the general activities of the London Institution. Brough also gave a group of four lectures as a holiday course for young people, entitled 'On the Philosophy of Magic'. The practice of giving such Christmas lectures continued for several years after Brough's death which took place at the Institution on 7 September 1872.

In 1871 the managers reported that the growth of the library was hampered by lack of space and that further room could be made by roofing over a piece of waste ground that lay to the west of the building and which was already partially enclosed by high walls. Unfortunately, the cost of such roofing would exceed any sum that could be drawn from the general funds of the Institution and as the managers did not wish to entrench upon capital, they suggested that the proprietors might raise money by voluntary contribution - a hint that was obviously not acted upon because, in the next year's report, the managers were still complaining of lack of space for the library.

On 8 November 1871 the managers called a special meeting to discuss the subject of increasing the accommodation for the library. An architect, Mr. Clifton,²⁷ was authorised to investigate the whole question and to report to the board on the best method of accommodating the library and of using the unoccupied space, with the special instruction that the cost of any alteration or addition had to be moderate. On 13 March 1872 Clifton presented two schemes, one for covering the ground to the west of the building, the other for building in the garden to the north-east. The approximate cost for the first scheme was £2,975 and for the second £3,375. It must be assumed that both schemes proved too costly as nothing more was

27. Edward Norton Clifton (1817 - 1889). Architect in the City of London. Designed the Gresham Houses in Old Broad St., East India House in Leadenhall St., and Finsbury Technical College. (The Builder, 56. 1889, p.34).

heard of them.

After Brough's death in 1872, Henry Edward Armstrong²⁸ agreed to take over the duties of the librarian for the time being. In January 1873, E.B. Nicholson was appointed principal librarian from a list of 73 candidates. He was to take up his appointment on 12 February, subject to the same conditions of residence and superintendence of the building as Brough had been. His salary was £200 per year.

Edward Williams Byron Nicholson (1849 - 1912)²⁹ had been educated at Trinity College, Oxford and had worked as a schoolmaster before being appointed librarian at the London Institution. In 1877 he was one of the founders of the first European Conference of Librarians and was one of the secretaries of the conference. In the same year, he helped to organise the Library Association and was joint secretary in 1877 and 1878. He was appointed Bodley's Librarian in 1882 and, following his experience in the London Institution library, he introduced a detailed scheme of shelf-classification and arrangement, reformed cataloguing methods, organised a subject catalogue and increased the staff of the library. He worked hard to improve the financial position of the library and promoted far-reaching schemes for its extension, including the provision of an underground storage room, which was completed after his death. He was the author of numerous publications and also collaborated with Sir John Stainer in preparing works on early Bodleian music.

In 1874 the managers were able to announce that extra library accommodation had been made by erecting more bookcases in the library gallery.

28. See p.172

29. He added "Williams" to his name in 1890. D.N.B. ; K.A. Manley, 'E.B. Nicholson and the London Institution', Journal of Librarianship. Jan.1973.

In addition, the principal librarian had reported the necessity for a new and systematic arrangement of the whole library which would be followed by the compilation of a new up-to-date catalogue. By the following year, the task of arranging the library was well under way, with the recesses on the main floor completed and the gallery started on. Also, modern reference works were being added,²⁹ in which the library was deficient and the managers hoped that "by making its advantages more generally known and accessible, they hope to restore it to its due position among the libraries of the Metropolis"³⁰. In what must be an attempt to put this intention into practice, a letter appeared in The Times for Saturday 15 November 1875, signed "J.B." (probably James Ridsen Bennett, one of the managers) pointing out that "in Finsbury Circus there is a library in some respects far superior to the Corporation Library (i.e., the Guildhall Library), which is open from 10 in the morning til 9 at night and yet is conspicuous for its emptiness."³¹ Anyone wishing to use the library was advised to contact the principal librarian. Nicholson replied to this, reporting that he had received a number of applications and describing how to reach the Institution on the underground railway.

The managers seem to have felt that their efforts to increase the use of the library had been uncessful as they reported in 1879 that, " the number of readers in the library increases, so that, while no student is denied admission on age alone, the principal librarian now finds it necessary to refuse tickets to those who would apparently use them for the purpose of doing ordinary schoolwork."³² By contrast, the librarian's report which

29. Money spent on the library increased after 1876. See Appendix IV Table I.

30. Annual Report for 1875.

31. Letter to The Times, 15 November, 1875.

32. Annual Report for 1879.

was printed in the 1880 report, indicated that most of those using the library were "schoolboys, university students, clerks and board-school teachers"³³ who read little beyond Greek and Latin classics, elementary chemistry, mathematics and physics, and dictionaries and encyclopaedias. Their requirements would be satisfied by a much smaller library of perhaps, 5,000 selected volumes. Sections such as history and natural history, which were among the best in the library, remained virtually untouched and it was probable that of the 65,000 volumes in the library, some 55,000 were not removed from the shelves from one year to the next. Neither the proprietors nor their families made much use of the library, "while the number of those who are at all frequent readers might be counted on the fingers of one hand."³⁴ If any increase in the numbers using the library were to be made, the increase would almost certainly be drawn from the groups, such as schoolboys and students, which had been mentioned earlier in the report. Nicholson felt that the main reason for the lack of proprietors using the library was that most of them now lived in the new suburbs and did not wish to make a long journey back to the City to work in the library. He therefore wished to put books from the reference library, with certain exceptions, into circulation, as he thought this would increase its usefulness to an extent that would not be possible any other way.

The librarian's next report was read to the managers on 8 December 1880, when it was made clear that there was still cause for complaint. Many of the books in the library were in a dilapidated condition. Nicholson reckoned that 8,000 books were in need of rebinding. The main reason was that they had calf or half-calf bindings which had crumbled. Probably the

33. Librarian's Report for 1880.

34. Ibid.

gas-lighting had, over the years, contributed to the decay of the bindings and the warm-air heating system had probably had a very drying effect. The managers were sympathetic with the librarian's problems and allowed large sums of money to be spent on binding.

In February 1882, the managers received Nicholson's resignation and called a special meeting to decide the next step. They resolved to advertise the post and the successful candidate would have to live in the Institution and be responsible for superintending it, he had to have good administrative ability and be acquainted with the work of a librarian. He also had to be competent in languages, with good literary attainments. His salary would be £250 a year and he should not be more than 40 years of age. These requirements contrast with those thought desirable before Brough was appointed. No mention was made of lecturing ability (Nicholson gave two lectures only while he was librarian) nor of scientific attainments. Instead a "competent knowledge of languages" was required.

At a special meeting held on 5 April 1882, the managers decided to appoint James Horsburgh,³⁵ senior master of modern subjects at Radley College, as principal librarian, out of 44 candidates. He was to take up his duties within a fortnight of Nicholson's departure. His term of office was less eventful than that of Nicholson and he resigned on 11 August 1886, having been appointed secretary to University College, London. The appointment of another librarian was referred to a special sub-committee which, together with the solicitor, was to consider the duties and emoluments of the post.

The outcome of their deliberations was a considerable increase in the responsibilities of the librarian. He was to be superintendent of the

35. L.I. Managers' Minutes; Annual Report for 1887.

building, director of the library, both reference and circulating, and generally in control of the whole running of the Institution, being responsible to the managers. In addition, he was to have the care of all the Institution's books, to control expenditure on binding and the purchase of new books, to keep an up-to-date catalogue of the library and to have printed, every year, a list of additions to the library. With the honorary secretary, he was to make all arrangements for lectures, he had to keep a correct list of all proprietors and subscribers and their addresses, he was to receive their subscriptions and pay them to the bankers, he was to act as secretary at all board meetings and the meetings of the various committees, to take minutes at these meetings and to see that they were correctly entered in the minute books. He was also to assist the honorary secretary in preparing a draft of the annual report to be submitted to the board of management. His salary was to be £400 per year and the post was to be advertised in the Times and Athenaeum.

On 13 October 1886, Robert Watson Frazer, B.A., LL.B, Indian Civil Service (retired), (1854 - 1921)³⁶, formerly a lecturer at University College, London, was appointed principal librarian. He was the author of several works on India and while he was at the London Institution he gave two lectures on India. When the School of Oriental Languages was established he became a lecturer in Tamil and Telugu there.

In January, 1896, because of the parlous state of the Institution's finances, it was suggested that certain of the books in the library, which could be classed as 'literary treasures' should be sold to raise money. The matter was referred to the library committee to consider what books, if

36. Who was Who. 1916-28.

any, could be disposed of but no further mention was made of this scheme.

A transfer of a different nature came about in 1904 when the managers received a letter from the director of the London School of Economics and Political Science, asking whether the collection of Blue Books in the Institution library could be deposited at the L.S.E. library, since the latter's collection of Blue Books was very incomplete and much in demand. There is no definite record, either in the L.I. or L.S.E. archives of when the transfer actually took place but the number of Blue Books in the L.S.E. library rose sharply from 1,346 in 1903 - 4 to 2,600 in 1904 - 5.

Finally, the Treasury letter of 31 January 1912, states that the books and manuscripts in the library were, with some exceptions, to be transferred to the Guildhall library, the British Museum and "to such other public authority as may be arranged."³⁷

37. See below p.180 and p.205.

The Lending Library.

Circulating libraries of various types were flourishing by the end of the eighteenth century. Some of these were private subscription libraries, others were book clubs and both kinds depended upon annual subscriptions from members. The most popular form of circulating library, however, was the commercial library, operating for profit.³⁸ In addition, some organisations acquired a library which was then made available for circulation among the members. Examples of such institutions are the Russell Institution³⁸ and the Philomathic Institute.³⁹

The question of a lending library at the London Institution had first appeared in March 1809, when a motion signed by 79 proprietors, asking for a circulating library, had been put to a special general meeting. After discussion, the motion was adjourned 'sine die'. There matters rested until 1816, when a letter from 'Thomas Fletcher, a proprietor' was sent to the managers requesting that part of the library be made available to proprietors in their own homes. The managers made no comment on this letter but they did insert a paragraph in the 1816 report, suggesting that part of the library be circulated. Whether this had anything to do with Fletcher's letter is not known but, in any case, the managers were trying to raise money and this struck them as a way in which it could be done. However, no further action was taken on this plan because, the managers said, it would cause dissention among the proprietors which was undesirable. Nevertheless, in September 1816, another plan appeared to make part of the library available for borrowers which was referred to the book committee, after which nothing more was heard

38. See: Thomas Kelly, Public Libraries in Britain before 1850. p.25, 26.

39. See p.7

about the scheme.

The annual report for 1820 returned to the idea of a lending library as a means of raising money for the Institution by allowing proprietors to borrow books on payment of one or two guineas. The managers then listed a large number of objections to the proposal including wear and tear on books, increased expenditure on the library both for books and more assistance and annoyance that might be caused to proprietors who turned up at the Institution to consult a book only to find that it was out on loan. They then concluded that the plan could not be recommended to proprietors (who had no chance to voice their opinions).

The idea did not reappear until 1836 when, as a result of recommendations by the visitors' committee, the managers decided to ask the solicitor's opinion about having a circulating library. Vandercom's opinion was that the terms of the Institution's Charter did not allow for a lending library and the only way that proprietors could have one was to organise a book-circulating club with their own funds amongst themselves without any help from the Institution.

The proprietors seem to have accepted the situation until 1852 when, at the annual general meeting, they passed a resolution asking the managers to look into the problem of a circulating library. A sub-committee was appointed, the Institution's solicitor was instructed to ask the opinion of counsel on the matter and the sub-committee prepared a draft report to be given to the proprietors at a special meeting on 28 October. At this meeting the managers reminded the proprietors of Vandercom's opinion, which had been given in 1836 and the scheme came to nothing.

However, it was revived in October 1857 when the managers heard the

report from the visitor's committee on the subject of hiring books. This was referred to the library committee for consideration. At their November meeting the managers decided to accept the visitors' recommendations and pay a subscription of £25 to Mudie's Library⁴⁰, which was to be tried for one year and reconsidered at the end of that period. The experiment was a success and by 1860 the subscription had been increased to £100. Since the circulation of hired books was so popular, the managers asked the librarian to prepare a selection of books from the general library with a view to extending the circulating service if the increased subscription to Mudie's proved successful.

According to the 1862 report, 200 proprietors were using the book-lending service. Later that year, it was reported to the managers that the Library Company Ltd.⁴¹ had offered to supply 520 volumes for £100 per year, to give, if required, 30 copies of any new work and to allow any number of reviews and magazines. For 10-6d extra, their cart would call twice a week to exchange books with no limit as to the number. The company also agreed to supply any new books at a 25% discount. The managers decided to discontinue the subscription to Mudie's Library and accept the offer of the Library

40. Mudie's Library was started by Charles Edward Mudie, who began a system of lending one exchangeable volume at a rate of 1 guinea per annum in 1842. Ten years later he moved from Southampton Row to premises in Oxford St. He bought large numbers of popular works to satisfy customers' demand. For example, 1,000 of Adam Bede, 2,000 of Livingstone's Travels and 2,400 of Macaulay's History of England were purchased. In 1864, Mudie made over his library to a limited company of which he held half the shares and retained the management. The business closed on 12 July 1937 having had to move into smaller premises in Kingsway after the 1914 - 18 war.

41. The Library Company Ltd. of Pall Mall, tried to undercut Mudie's by attempting a $\frac{1}{2}$ guinea subscription scheme but was forced out of business after a short while.

Company. Following correspondence with Mudie's Library and with the Library Company, the managers were told in November 1863 that 300 volumes only could be obtained for £100 from Mudie but that the Library Company would supply 400 and 100 more, half new and half old, for each additional £25. It was decided that £150-10-6d should be paid to the Library Company. In October 1864 the managers decided not to renew the subscription to the Library Company but to refer the matter to the library committee to act on behalf of the managers, with the result that books were borrowed from W.H. Smith & Son.⁴²

Both the 1868 and 1869 reports refer to the cost of the circulating library (£256-6-0) which was causing concern to the managers. What was spent on circulating books could not be spent on improving the reference library, which was still one of the main objects of the Institution, as prescribed by the Charter. In order to stem the rising cost of the circulating library, it was decided to purchase books to form the Institution's own circulating library and thus to save money by reducing the subscription paid to W.H. Smith & Son.⁴³ It was hoped that such a library would have about 1,000 books but progress was slower than had been hoped. By 1870 the 'permanent circulating library' had a nucleus of 171 books. One proprietor, Reithmüller,⁴⁴

42. W.H. Smith & Sons lending library was started as a development of the railway bookstall business built up by William Henry Smith (1825 - 91). In 1851 he had secured the monopoly of station bookstalls on the London and North Western Railway and by 1862 he had the exclusive rights of bookselling with most English railways. In 1858, Mudie refused to start libraries at W.H. Smith's railway bookstalls and this forced Smith into the competing business that lasted until 1961.

43. For a complete list of expenditure on the Circulating Library, See Appendix IV, Table 2.

had donated seven volumes of his own works and the rest of the proprietors were invited to imitate him, whether they were authors or not.

By the following year, the number of books in the permanent circulating library had been increased by purchases and donations to 450 and, as a result, the amount paid to W.H. Smith & Son had been reduced to £206-6-0, while the number of proprietors using the library had increased steadily during the year. The number of books added to the circulating library continued to increase and a catalogue became necessary. This was reported to be complete and in the press in the 1875 report. The same report stated that, in addition to the increased number of books in the circulating library, the subscription to W.H. Smith had been increased and subscriptions had been taken out to Rolandi's Foreign Library⁴⁵, Lewis's Scientific Library⁴⁶ and Augener's Music Library. Later, a subscription was started to Day's Library⁴⁷. All these additional subscriptions seem to contradict the original idea behind the permanent circulating library.

44. Christopher James Reithmüller, who wrote:

Aldersleigh, a tale, 2 vols. London 1868.

Alexander Hamilton and his Contemporaries; or the Rite of the American Constitution. (London 1864)

Early and Late Poems. London 1893.

Frederick Lucas. A Biography. London 1862.

Julian the Apostate, a tragedy in 2 parts (In verse) London 1883.

Launcelot of the Lake, a tragedy in 5 acts. (In verse) London 1843.

The Layman's Creed. (In verse) London 1865.

Teuton, a Poem. London 1861.

Three Legends of the Early Church. 1868.

45. Rolandi's Foreign Library was run by Pete Rolandi from c1860 to 1910 at 20, Berners Street, Oxford Street, London, W.

46. Founded in 1852 by Henry King Lewis, who owned a bookselling and stationary business in Cowes St.

47. Day's library was founded in 1776 by William Dangerfield and later passed to John Day and then Charles Day. It found difficulty in competing with Mudie.

At the 1878 annual meeting the proprietors unanimously passed a new bye-law authorising the board "to lend out books from the reference library to such persons as they thought fit". The board empowered the principal librarian to use his discretion as far as lending to proprietors and life subscribers was concerned. The librarian wished to lend books to annual subscribers as well and a special committee was appointed to look into the matter.

An increase in the numbers using the circulating library was brought about by the introduction, in 1878, of a new class of annual subscriber who, for a payment of two guineas per year could use the library but not be admitted to lectures. On March 11 1880, the managers decided to allow subscribers as well as proprietors to borrow books from the reference library. The president, Warren de la Rue, announced that in order to start putting the library into a suitable state for circulation, he would give £100 and J.P. Cassiot, jnr., one of the managers, announced that he would give £50. Both these sums were to be placed at the disposal of the principal librarian and honorary secretary to obtain extra help for the completion of the rearrangement and pressmarking of the books. The committee that had been appointed to consider the matter of allowing books from the reference library to go into circulation reported to the managers on 4 November 1880. They considered that the following classes of books should not be loaned: those too valuable to be replaced if lost, recent encyclopaedias, dictionaries and similar reference works in all subjects, books in regular demand for school or university studies, new parliamentary papers likely to be wanted for reference and books in poor repair. They also considered that, in the case of a book of particular value, a receipt should be signed by the borrower and if a book was required by a proprietor it should be called in

immediately. A further recommendation was that proprietors, life-subscribers and annual subscribers should be entitled to borrow ten volumes from the amalgamated reference and circulating libraries as this was the number which the two former groups had previously been allowed and was also the number permitted to borrowers from the London Library.

According to the 1880 report, £300 per year was derived from subscribers who had no admission to lectures and who were in most cases attracted by the circulating library. The number of books in the permanent circulating library had reached 5,000 and a foreign section had been started. During the previous year, nearly 45,000 volumes had been circulated.

The 1881 report noted that the reorganisation of the library had been completed and the new arrangements for the circulation of books were working well. Since the new regulations had been in force, there had been an average weekly increase in circulation of 429 volumes, or 43% above the corresponding period of the previous year and the proportion of old subscribers who had renewed expiring subscriptions had risen from 67% to 80%. The cost of buying new books and rebinding the others was covered by the income obtained from subscribers. The salaries of the two assistant librarians were to be increased to £180 and would be further raised to £200 the following year. In addition, to overcome the problem of proprietors who lived at a distance and who wished to borrow books, an arrangement had been made (although it is not stated with whom) whereby they could have their books delivered and returned by parcels delivery at very low rates. However, in July 1882 the managers decided to apply to the London Parcels Delivery Company for the delivery and collection of the books in circulation.

By 1887 the lending library had grown to such an extent that more space had to be made available to accommodate it. Accordingly at the next general

meeting a resolution was passed to carry out various alterations to the building. The circulating library would occupy the pamphlet room and the basement below and as much of the adjoining basement as would be needed to provide storage space. The circulating library and basement would be connected by a staircase and booklift, the latter to be continued up to the reference library. Further shelf room was to be made by squaring the west end of the ground floor room.

In the 1890 report the managers announced that they had discontinued the subscription to W.H. Smith & Son and the money so saved would be spent on adding to the Institution's own library. Also, proprietors, for an extra fee of 10 shillings would be able to receive and return library books carriage free by the London Parcels Company or Carter Patterson & Company.

Four years later the managers announced that a catalogue of the circulating library was essential since some 15,000 volumes had been added to it since the 1887 catalogue was printed, when it contained only 13,000 volumes. A manuscript catalogue had been prepared and the managers hoped to have it printed as soon as finances permitted. The next year, however, the board decided not to have it printed because of "the state of the finances of the Institution and the ephemeral nature of many of the works circulated." Instead, the manuscript catalogue was placed in the library for those who wished to use it.

Despite all this activity, a report from the library committee in October 1894 suggests that things could have been better. Certain abuses, such as several members of one family borrowing on one subscription had been noted, as well as, amazingly, "of the 19th Century, the Fortnightly and the Contemporary, 36 copies are now taken and the annual cost is about £36."⁴⁸

48. Managers' Minutes, October, 1894.

The library committee asked that certain recommendations be accepted: that the number of volumes issued to proprietors and subscribers should remain the same but that of those, only 3 and 2 respectively should be works published in the previous six months, including magazines; that a proprietor or subscriber should be allowed only one magazine or review at any one time and that 7 days be allowed to read it; that books could not be exchanged more than once a day and that if books or magazines were kept beyond the allotted time, no further issues should be made until they were returned. In addition, the committee recommended that a new class of subscriber should be admitted at two guineas a year who should have access to the news room and reference library and be allowed to take two volumes from the circulating library. Even though these regulations were adopted, the lending library continued to be popular and the 1902 report still indicated a slight increase in the number of books borrowed.

On 9 December 1895, George Parr, one of the assistant librarians resigned because of age and ill-health. He had worked at the Institution for 30 years and during that time had invented a card ledger for the circulating library which had saved a great deal of the librarians' time. The managers granted him a pension of £80, allowed him admission to the Institution and also the use of the reference and circulating libraries as if he had been a proprietor. When Henry Williams retired in 1898, he was given a pension of £90 and allowed to take books out of the library.

After the passing of the London Institution Transfer Act of 1912, all subscriptions to circulating libraries were discontinued.

The Dispersal of the Library.

The Westminster Gazette of 11 April 1912 reported the proposed foundation of a School of Oriental Languages in the London Institution building. It stated that most of the library was being handed over to the School, with certain exceptions, which were:

- Albertus Magnus, Liber de muliere forti. 1499
- Antoninus, Incipit summula confessionis. 1473
- St. Augustine, Ex libro retractacionum. 1470?
- Bonnor, L'arbre des batailles. 1493
- Franciscus Columna, Hyperotomachia Poliphili. 1499
- Froissart, Chroniques de la France. Early 15th century.
- Nicolaus de Auximo, Supplementum Summae Pisanellae. 1474
- Melchior Pfintzing, Ritter Tewrdannckh. Augsberg 1519.
- Vorragio, Thus endeth the legende. 1503

There was also a series of tracts, published between 1648 and 1660, relating to Christópher Love, who was executed for treason in 1651. The list also included four Shakespeare folios, as follows: the first, printed by Isaac Jaggard and Ed. Blount of London in 1623; the second, printed by Thomas Cotes for John Smethwick, London, 1632; the third, printed in London for P.C. in 1664; and the fourth, printed for H. Herrington, E. Brewster and R. Bentley of London in 1685.

These items were to be offered to the British Museum but most of them were duplicates of items already possessed by the Museum. Two items, the Shakespeare folio of 1632 and Froissart's Chronicles were accepted, with the thanks of the trustees of the Museum to the proprietors of the London Institution. The others were presented to the Guildhall Library, together with some topographical works specially relating to the City of London.

This arrangement was not to everyone's liking. "The transfer of the London Institution and its property, by virtue of an Act of Parliament which received the Royal assent a week or two ago, has already resulted in the presentation to the British Museum and the Guildhall Libraries of a number of very scarce and costly books. Several Shakespeare folios have been transferred as well as a number of other works, well known and greatly coveted by all collectors, who are thus, as it were, deprived of the pleasure of competing for their acquisition."⁴⁹

The rest of the library was split up later. When the School of Oriental Studies was constituted in 1916, the Oriental books in the libraries of London University, King's College and University College were transferred to the School and in exchange they received books from the Institution's library. There is no precise record of the books transferred to London University Library, except for seven items⁵⁰ specifically concerned with the London Institution. University College Library received two series of tracts, the Halifax Tracts and the Lansdowne Tracts. King's College Library received 3,000 volumes dealing with English medieval history before 1485, European mediaeval and modern history, colonial history, other than American, naval history, works relating to Shakespeare and works on natural science. The assistant librarian, Frederick Cox, remained at the Institution to help sort out those books which were to be transferred to the School library and those which were to go to the continuing members' library

49. Bazaar, Exchange and Mart, 29 Jan., 1913, p.205.

50. a) London Institution, Historical Account & Lectures, which contained A Catalogue of the Library, A Bibliographical Account of La Description de L'Egypte (ed. E.F. Jomard) and A List of Donations to the Library, 1834 - 37.
 b) R.W. Frazar, Notes on the History of the London Institution.
 c) International bimetallism versus monometallism: A report of the discussion at the L.I., 22 May 1895.
 d) C. Butler, Inaugural Oration
 e) Report to the proprietors on reconstruction or rebuilding, 1908
 f) Catalogue of the Library of the L.I. 4 vols. 1835 - 52.
 g) The Charter, Act of Parliament and Bye-Laws of L.I., 1902

As has been said, the library was the major item of expenditure of the early Institution and it contained some rare items.⁵¹ Its importance was reflected in the appointment of Porson, a renowned classical scholar, as the first librarian.⁵² Porson unfortunately apparently assumed that he had been appointed to add lustre to the Institution and its library, as he was not very conscientious in his work.⁵³

The importance that was placed on the library is also clear from the salaries and treatment that the librarians received compared with laboratory personnel. Porson was appointed at a salary of £200 p.a., which Maltby⁵⁴ also received until he retired in 1834, when he received £100 p.a. and continued to occupy his rooms at the Institution. After Maltby's retirement, Brayley and Thomson were appointed as joint librarians⁵⁵ at a salary of £150p.a. Although this was not increased until 1857, when it was raised to £175,⁵⁶ William Robert Grove,⁵⁷ who was professor of natural philosophy from 1841 to 1845 was paid £100 p.a., while subsequent laboratory appointees, Thomas Augustine Malone,⁵⁸ Frederick Field,⁵⁹ James Alfred Wanklyn⁶⁰ and Henry Edward Armstrong,⁶¹ only received 50 guineas per year. In addition, Malone and Wanklyn were dismissed, apparently for little obvious reason,⁶² while Armstrong in 1877 asked to have his honorarium raised to £100 but without success. He was told that the Institution could not afford to pay more, which he must have found galling as the then librarian, Nicholson, had received a rise of £100 the previous year.⁶³ When Horsburgh was appointed to succeed Nicholson, his salary was £250,⁶⁴ a decrease, but when R.W. Frazer became librarian, he was paid £400 p.a.⁶⁵

51. See p. 86
52. See p. 87
53. See p. 94
54. See p. 90
55. See p. 98
56. See p. 102

57. See p. 156
58. See p. 164
59. See p. 165
60. See p. 167
61. See p. 172
62. See p. 164 and 170

63. See p.174,175.
64. See p.108
65. See p.109.

Although the librarians evidently had to work hard, especially when the circulating library became popular, they were well paid and also had assistants, which gives an indication of the importance that the managers attached to the post.

Unfortunately, there is little information on how many people used the library or who such users were. If Nicholson is to be believed, in 1880⁶⁶ those using it for reference were not those for whom it had originally been attended, namely commercial men, proprietors of the Institution.

Over the years, the managers' repeated refusals to allow proprietors to borrow books seems surprising. It was not until the circulating library got into its stride that the Institution became really popular and prosperous⁶⁷ although it is not clear why the numbers of those becoming subscribers so that they could borrow books rather than attend the lectures declined during the 1890s, although the library still remained popular⁶⁸ and was the central feature of the Institution's activities.

66. See p.107

67. See p.117

68. See p.119

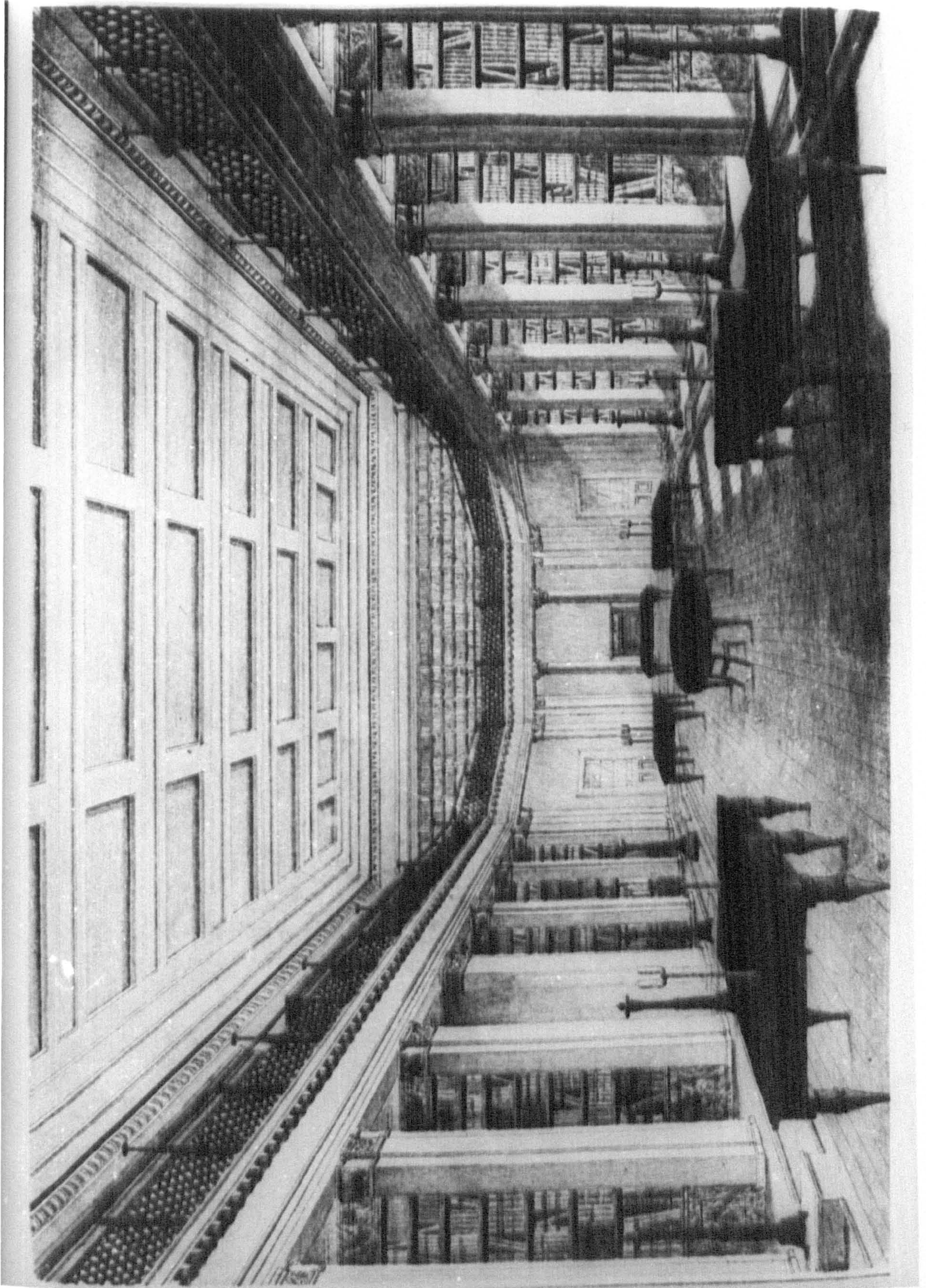


Plate V. The Library.

Chapter 5.

Lectures, Soirees and Laboratory Classes.

In his speech following the ceremony of laying the foundation stone¹ of the Finsbury Circus building, Charles Butler spoke of the mutual dependence of science and commerce. He instanced the dependence of commerce on navigation; the production of metals, in which there "scarcely is a process which the workman does not owe to chemistry";² the necessity for accurate surveying and land-drainage and, finally, the importance of the newly-invented miner's safety lamp.

When William Brande³ gave the inaugural lecture in the new lecture theatre on 5 May 1819, he too spoke of the connection between the scientific and commercial interests of a country. The importance of this link could be seen in such industries as bleaching, dyeing, tanning, pottery and glass-making. He also praised the proprietors and those who had planned the Institution for demonstrating that a high commercial standing and wealth were not incompatible with "enlarged minds, liberal views and cultivated understandings."⁴

With the lecture theatre suitably opened, the Institution was ready to embark on its first lecture season. Although the giving of lectures was one of the main objects of the Institution, the premises occupied during its early years were unsuitable for the accommodation of an audience and so on lectures were held until the premises in Moorfields were ready. By early

1. See also p.15 and p.66.

2. Butler's speech at laying of foundation stone, 4 November, 1815. In British Museum; also Gent. Mag. 1815, Vol 85 ii p.460 - 463.

3. William Thomas Brande (1788 - 1866). Professor of Chemistry at the R.I. from 1813 to 1854 when he was appointed chief officer in the Coinage Dept. of the Royal Mint. He was one of the secretaries of the Royal Society from 1816 to 1826 and in 1836 was named as one of the original Fellows of the University of London. He also edited the Quarterly Review of Science and Art.

1819, the new building was nearing completion and the managers decided to request William Brande, Richard Phillips⁵ and John Millington⁶ to give courses of lectures. These lectures would be conditional upon suitable access being made to the Institution's building and eventually only Brande's course was given. Millington and Phillips were informed that the Institution would be glad of their services when a better road had been made.

Following his inaugural lecture, Brande gave a series of nine lectures, the title of which originally was, 'On the Principles of Chemical Science'. It seems, however, that they were chiefly intended to show off a wide variety of apparatus (presumably from the Institution's collection) and the title subsequently became, "A Course on Heat, Light, Electricity and Voltaic Electricity".

The first full lecture season, that is, in the winter of 1819 - 20, included an honorary course of 15 lectures on 'Natural Philosophy' by George Birkbeck,⁷ 13 lectures on the elements of chemistry by Richard Phillips and 14 lectures by John Millington on the useful applications of natural philosophy to society by hydraulics, mechanics, optics and the use of steam engines and other machines. John Taylor,⁸ treasurer of the Geological Society

4. From Brande's inaugural lecture, 5 May, 1819. (In British Museum also Guildhall Library, bound with Annual Reports.)

5. Original proprietor of L.I. See Appendix I 'Original and Elected Proprietors'.

6. John Millington (1779 - 1868). Began lecturing at the Royal Institution in 1815 and was appointed Professor of Mechanics there in 1817. He was one of the original Fellows of the Astronomical Society and was its secretary from 1823 to 1826. He was on the teaching staff of Guy's Hospital and Vice-President of Birkbeck's London Mechanical Institute. In 1829 or 1830 he went to America as chief superintendent of silver mines and superintendent of a mint in Mexico. In 1837 he became professor of chemistry and natural philosophy at William & Mary College, Virginia, and later was appointed State Geologist of Mississippi (DNB)

7. See p.187

8. John Taylor (1779-1863) Mining engineer. Mineral agent to the Duke of Devonshire and the Commissioners of Greenwich Hospital. He became a Fellow of the Geological Society in 1807 and was Treasurer from 1816 to 1844. He was elected F.R.S. in 1825. In 1832 he was active in the foundation of the British Association and was one of the founders of University College London. (DNB)

gave six lectures on practical mining, Sir James Smith,⁹ president of the Linnaean Society, delivered two lectures on botany and William Crotch,¹⁰ professor of music at Oxford, gave six lectures on 'Style in Musical Composition'.

From this list, it can be seen that many of the lectures were on the practical uses of science, with others which were mainly intended to entertain. This was a pattern that was followed for several years. Some of the lecture titles, such as those given by Norton Webster on 'The Motive Forces of the Arts', which were illustrated by models of machines and steam engines, give a fair indication of their practical bias. Others, such as Spurzheim's¹¹ series on phrenology, given in 1825 - 6 and 1827 do not, at first sight, appear to have practical applications. However, according to the syllabus, "Phrenology is the foundation of a sound doctrine of Insanity"¹² and ought to be understood by jurymen and the public in general. A knowledge of phrenology was also desirable for any educator or legislator. Those who listened to E.J. Clark's lectures on botany in 1828 were invited to consider the "philosophy of final causes as exemplified in the Vegetable Kingdom",¹³ as well as the connection between botany and therapeutics.

The first season of lectures proved to be such an expense that none were given the following year and they were not resumed until the finances had been put on a firm footing by the 1821 Act. Nevertheless, attendance during the

9. James Edward Smith (1759 - 1828) Botanist, trained in medicine. In April 1788, the first meeting of the Linnaean Society was held in his house in Gt. Marlborough St., when he was elected president, an office he retained until his death. The seven years of his life he spent compiling The English Flora. (DNB)

10. William Crotch (1775 - 1847). Child prodigy who played the violin and piano by ear. In 1786 went to Cambridge and in 1790 became organist at Christ Church. He became a member of the Philharmonic Society in 1814. When the Royal Academy of Music was founded in 1822 he was appointed the first principal, resigning in 1832. (DNB Grove, Dictionary of Music.)

11. Johan Gaspar Spurzheim (1776 - 1832). Pupil and colleague of Franz Gall. Introduced the term "phrenology" and publicised its doctrines vigorously in Europe and America.

12. From the syllabus of Spurzheim's series of lectures for 1827.

13. From the syllabus of E.J. Clark's series of lectures for 1828.

first season seems to have been quite high because, according to the managers, "the number of individuals who frequent the theatre of the London Institution during the present season varies from 400 to 700"¹⁴

Exactly how the managers went about engaging people to give lectures is not always clear. Certainly some of the lecturers wrote to offer their services, which were not always accepted and on one occasion, in October 1830, the managers advertised in the newspapers, stating their willingness to consider propositions for lectures. It is likely, too, that arrangements were also made by personal contact.

As the years passed, courses consisting of ten or twelve lectures, or sometimes more, gradually disappeared and by the 1840s groups of four or six lectures more common although it is difficult to judge to what extent, if any, attendance numbers changed. Gideon Mantell,¹⁵ who lectured on several occasions during this period, recorded "between 700 and 800 persons present."¹⁶ at a lecture he gave in 1844. On other occasions, he declared, the lecture theatre was 'crowded', despite heavy rain on one evening, thick fog on another and intense cold on yet another. His first soiree lecture on 16 March 1842 was "rapturously applauded".¹⁷ Alfred Smee,¹⁸ who was one of the managers, also described lecturing to a crowded theatre.

Needless to say, not everyone was satisfied with the lecture arrangements. A special general meeting was held on 21 August 1855, when a motion, signed by fifteen proprietors, asked that the managers should cease to arrange lectures in sets of six, "on incidental and heterogeneous subjects of science and literature . . . a procedure which has everywhere been found useless as

14. Letter to Gresham Committee, Managers' Minutes, 23 March, 1820.

15. Gideon Mantell (1790 - 1852) A surgeon and apothecary who studied geology and natural history in his own time. In later years, he devoted himself mainly to writings lecturing. F.L.S., 1813; F.G.S. 1818; F.R.S. 1825.

16. Journal of Gideon Mantell, 28 Nov. 1842.

17. Ibid. 16 March, 1842.

18. See pp. 44, 139, 192

a means of instruction"¹⁹ and instead should arrange for courses of lectures to be given on "experimental philosophy, chemistry and the various branches of literature, science and art."²⁰ However, when a vote was taken, the motion was declared defeated. Others thought that the Institution should aim to be an "Adult College",²¹ to give systematic instruction in science to the proprietors. An opposing view was expressed at the annual general meeting in 1867, when one proprietor complained that that season's lectures had been "dry" and that he thought it would be a good idea to replace Professor Owen's²² lectures by those of the Rev. Mr. Bellew,²³ a suggestion that appeared to cause no little amusement."²⁴

Despite these dissensions, very little change took place in the pattern of lectures until the 1870s when single lectures became much more usual, although from time to time the managers were asked to return to the pattern of former years. According to the Journal of October 1871, the programme for the evening lectures had been intentionally left open so that "subjects of passing interest may be taken up as they arise." The educational lectures, soirees, Travers lectures²⁵ and musical evenings had all been arranged and proprietors would be notified in the Journal as and when arrangements were made for the other lectures. With this new arrangement, the number of lectures

19. Minutes of Special General Meeting, 21 August, 1855.

20. Ibid.

21. Adam Scott, The London Institution as it has been, and as it ought to be, p.26. Scott was a bookseller and a proprietor of the L.I.

22. Richard Owen (1804 - 92) Naturalist and friend of Whewell. Elected F.R.S. in 1834 and two years later became first Hunterian professor of comparative anatomy and philosophy at the Royal College of Surgeons. Received the Wollaston medal of the Geological Society in 1838 and the following year helped found the Royal Microscopical Society. It was mainly through his efforts that the Natural History Museum, opened in 1881, was established. He opposed the Origin of Species, although his whole attitude to the problem was ambiguous.

given during the season remained approximately the same as did their cost.

At about the same time that single lectures with the emphasis on entertainment rather than instruction became common at the London Institution, the lecture programmes at the Royal Institution show a similar change. The long courses of lectures became fewer and sets of three to four lectures became more common. Although single lectures never became as numerous as they did at the London Institution, by the 1890s sets of two or three lectures were the rule rather than the exception.

An innovation in the 1870 - 71 lecture season was the reading and discussion of papers in the library, which had been requested by the proprietors, although two years later, the managers were complaining that proprietors had failed to submit any discussion papers for the winter of 1872 - 3.

The lecture programme suffered a set-back in the 1872 - 3 season because Brough,²⁶ the principal librarian, who was responsible for engaging speakers and arranging the lecture programme, had been suffering from his last illness at the time when lecturers were being booked for the winter season. As a result, the Institution was unable to obtain the services of Huxley²⁷ and Odling²⁸ but the educational lectures were given by Rutherford²⁹ and Duncan³⁰.

During its career, the Institution provided a varied lecture programme. Many of the lectures were given by well-known people such as Michael Faraday,³¹ Dionysius Lardner,³² and Southwood Smith³³ in the earlier years and later Gideon Mantell³⁴, John Tyndall,³⁵ Richard Owen,³⁶ Norman Lockyer³⁷ and Oliver Lodge.³⁸ Lectures on music always played an important part in the programmes and eventually led to the appointment of John Ella³⁹ as professor of music in 1871. A number of famous composers and musicians lectured at the Institution, including Sir Henry Bishop,⁴⁰ Sir John Stainer,⁴¹ Sterndale Bennett,⁴² Arnold Dolmetsch⁴³ and Sir Frederick Bridge.⁴⁴ From time to time,

too, proprietors of the Institution gave lectures. George Birkbeck⁴⁵ set the example which was followed by Alfred Smee⁴⁶, Charles Tilstone Beke⁴⁷, William Huggins⁴⁸, Sir John Lubbock⁴⁹ and several others.

23. Rev. John Chippendall Montesquieu Bellew (1823 - 74). Author, preacher and public reader. From 1855 to 1867 he was one of the most popular preachers in London. He became a Roman Catholic in 1868 and from then on gave his time to public reading and literature. He was a very successful public reader, rivalling Dickens and Fanny Kemble.

24. Illustrated London News. 50. 27 Apr. 1867, p.407.

25. See p.141.

26. See p.103.

27. Thomas Henry Huxley (1825 - 1895). Received a medical training and graduated from London University in 1845. In 1846 he was appointed assistant surgeon to HMS Rattlesnake and carried out his first biological research on Hydrozoa and Medusae. He returned to England in 1850 and was elected F.R.S. in the following year. From 1854 to 1859 he lectured at the Royal School of Music and in 1859 began his career of supporting Darwin's ideas. From 1863 to 1869 he was Hunterian Professor at the Royal College of Surgeons, and Fullerian Professor at the Royal Institution, 1863 - 7. He was interested in education and in 1870 became one of the first members of the School Board for London. He was Rector of Aberdeen University 1872 - 4.

28. William Odling (1829 - 1921). Qualified in medicine at London University, but was more interested in chemistry. Studied in Paris under Gerhardt and in 1863 became professor of chemistry at St Bartholomews hospital medical school and on Faraday's death was appointed Fullerian professor at the Royal Institution. He was appointed Waynflete professor at Oxford in 1872, a post from which he retired in 1912. His talent was more for teaching than original research and he was interested in problems of water supply and purification and its relationship with disease. He was elected F.R.S. in 1859.

29. William Rutherford (1839 - 1899). Physiologist, educated at Edinburgh and Berlin. In 1869 he was appointed professor of physiology at King's College, London and two years later became Fullerian Professor of Physiology at the Royal Institution. From 1874 until his death he was Professor of Physiology at Edinburgh. He did much to develop the science of histology but otherwise devoted much of his time to teaching.

30. Peter Martin Duncan (1821 - 1891). Trained in medicine and set up in practice in Colchester. He was very active in local affairs being Mayor in 1857. In 1870 he became Professor of Geology at King's College, London. He made a special study of corals and wrote a large number of popular and scientific works.

31. Michael Faraday (1791 - 1867). Copley medallist, Royal Medallist and Rumford Medallist. Professor of Chemistry at the Royal Institution.

32. Rev. Dionysius Lardner (1793 - 1859). Educated at Trinity College, Dublin, and took Holy Orders but devoted himself to literary and scientific work. In 1807 he was appointed to the Chair of Natural Philosophy and Astronomy at University College, London. His interests were wide and included railways, astronomy, natural and biological science. The lectures that he gave at the L.I. on Babbage's calculator was also delivered about the same period at the R.I. and elsewhere. The substance often forms a paper in the Edinburgh Review July, 1834.

33. Thomas Southwood Smith (1788 - 1861). Sanitary reformer. Studied for the dissenting ministry and later became medical student at Edinburgh. Received M.D. in 1816. He was a friend of Jeremy Bentham and dissected his body on 9 June 1839, under the terms of Bentham's will. He presented his first report on sanitary improvements in 1838 and other reports appeared at intervals until 1857. His reports on quarantine (1845), Cholera (1850), yellow fever (1852) and on the results of sanitary improvements (1854) were of world-wide application.
34. See p.128 note.
35. See p.163.
36. See p.129 note.
37. Sir Joseph Norman Lockyer (1836 - 1920) Astronomer. In 1869 he established Nature in co-operation with Alexander Macmillan and was editor to within a few months of his death. He was a successful popular lecturer and writer. In 1869 he was elected F.R.S. and received the Rumford Medal in 1874.
38. Sir Oliver Joseph Lodge (1851 - 1940) Studied at the Royal College of Science under Huxley, Frankland and Guthrie and at University College, London under W.K. Clifford and Carey-Foster. In 1881, he was appointed professor of physics at Liverpool, was elected F.R.S. in 1887 and received a Rumford Medal in 1898. He was appointed Principal of the new University of Birmingham in 1900 when his active career as an experimental physicist ended. He held this post until 1919. He was also actively interested in psychical research and was president of the Psychical Research Society from 1901 to 1904 and in 1932.
39. John Ella (1802 - 88). Violinist and concert director, played in many London orchestras. In about 1826 he held a post at the Royal Academy of Music and was the musical editor of the Athenaeum and other papers. He inaugurated the 'Musical Union' which gave concerts for 35 years. It was the success of the Musical Union which caused the managers to appoint Ella as Professor of Music.
40. Sir Henry Rowley Bishop (1786 - 1855), Composer of musical dramas, and 'Home Sweet Home'. He was one of the original members of the Philharmonic Society, founded in 1813 and for some time was Professor of Harmony and Composition at the Royal Academy of Music. From 1841 to 1843 he held the Reid Professorship at Edinburgh, and was knighted in 1842. He became Professor of Music at Oxford in 1853.
41. Sir John Stainer (1840 - 1901). Organist and composer, educated at Oxford and in 1866 he founded the Oxford Philharmonic Society. In 1881 he was appointed principal of the new National Training School for Music and in 1882 became Her Majesty's Inspector of Music in training colleges for elementary teachers. He was knighted in 1888. From 1889 to 1899 he was Professor of Music at Oxford and in 1900 became Master of the Musician's Company.
42. William Sterndale Bennett (1816 - 1875). Composer, born in Sheffield, who studied under Crotch and was much influenced by Mendelssohn. In 1856 he became Professor of Music at Cambridge and ten years later was appointed Principal of the Academy of Music. He was knighted on 24 March, 1871.
43. Eugene Arnold Dolmetsch (1858 - 1940). Musician and musical craftsman. In 1883 he became a student at the Royal College of Music and made a special study of old music and musical instruments. He also made reproductions of old instruments. The Dolmetsch Foundation was started in 1928 for the encouragement of early instrumental music.
44. Sir John Frederick Bridge (1844 - 1924). Organist and composer. In 1876 he was appointed Professor of Organ Playing at the National Training School for Music and the in 1883, Professor of Harmony and Counterpoint at the Royal College of Music. He became Gresham Professor of Music in 1890, was conductor of the Royal Choral Society from 1896 to 1902 and was knighted in 1897.

45. See p. 126,187.

46. See p. 139,192.

47. Charles Tilstone Beke (1800 - 74). Manager of L.I. Abyssinian explorer. Had commercial career and made first visit to Abyssinia in 1840 as he wished to open up commercial contacts, abolish slavery and discover the source of the Nile. He returned to England in 1843 and resumed his commercial pursuits but remained interested in his previous concerns. In 1864, he intervened in the case of British subjects imprisoned by the King of Abyssinia. He obtained their temporary release but they were re-imprisoned and ill-treated - this eventually led to the Abyssian War.

48. See p. 198

49. See p. 199,200.

As has already been said, attendance at the lectures was often described as 'crowded' and this seems to have been continued into the later years. After 1876, the lectures were advertised regularly in The Times and the managers frequently expressed their satisfaction at attendance although precise numbers were not always mentioned. In the 1893 - 4 season, there was a total attendance of 13,069 at the 32 lectures, making an average of over 400 at each lecture. A similar average attendance, 447 per lecture, was reported the following year. In the reports for 1896 and 1897, attendance was said to be still high.

After 1900, numbers started to fall despite the fact that most of the lectures were advertised as being 'illustrated'. The 1902 report said that lectures during the previous season had been "fairly well attended, considering the prevalence of illness and the unfavourable weather".⁵⁰ Average attendance at each lecture during the next two seasons was 385 and 326 respectively, followed by a sharp drop to 80 in 1905 - 6. The managers complained that "ten years ago, the average attendance at each lecture was found to be over 400 persons, including proprietors and free ticket holders."⁵¹ but they offered no explanation for the sudden decrease in numbers and there seems to be no particular reason for it. There were 28 lectures all told and the subjects are not noticeably different from those in previous years. In 1907, the average attendance was 84 but dropped to 64 in the following season. Numbers continued to decline, the reasons given in the 1910 report being the smaller number of lectures (27 in all) and the "remarkably unpropitious nature of the weather".⁵² The 1910 - 11 season brought a "slight increase" but numbers declined again during the final, 1911 - 12, season.

50. Annual Report for 1902.

51. Annual Report for 1906.

52. Annual Report for 1910.

The lectures at the Royal Institution over this period do not show the same decline in attendance; this came later, after 1914.⁵³.

53. Royal Institution: Friday Evening Lectures, 1866 - 1939.

The Soirees.

As the lectures had been so successful, the managers announced in an undated handbill (probably the latter part of 1827) that, "Encouraged by the success of the Royal Institution, the managers propose, during the present season, to try an experiment which they trust will prove acceptable to the proprietors. The library and theatre of the London Institution will be prepared during eight evenings for a soiree or conversazione to which proprietors and their friends will be admitted."⁵⁴ Coffee and tea were to be served in the library between 7p.m. and 8p.m. and models or drawings of new scientific discoveries and inventions would be on display there, as well as new works of literature, rare books and original drawings. During the evening, the company would adjourn to the lecture theatre where a short lecture would be given on "any new machinery, or on any chemical, philosophical or literary novelty that may be considered by the managers to deserve the attention of the Institution."⁵⁵ When the lecture was over, conversation could start again but the managers hoped that proprietors and their guests would leave by 10 o'clock. The soirees would be held on the first and third Wednesdays of February, March, April and May. On the day that a soiree was held, the library would be closed at 6 o'clock in the evening and reopen an hour later. Proprietors could bring one friend, entering his name in a book provided for the purpose but no-one would be admitted on a transferable ticket.

As indicated by the handbill, there were at first eight soirees per season but this soon decreased and by 1835 was down to four, a number which was maintained, with slight variation, until the 1870s.

54. Handbill announcing introduction of soirees.

55. Ibid.

When the soirees started, some of them were given by the proprietors and managers, the most regular speakers being George Birkbeck,⁵⁶ William Tite⁵⁷ and Alfred Smee⁵⁸. Such occasions became less frequent round about 1850 but were revived at the instigation of Richard Thomson,⁵⁹ who thought that, "at the conclusion of the season the papers might be collected, revised and increased if the authors were inclined to extend them and printed in a plain form to be presented to the proprietors."⁶⁰ Following this suggestion, William Tite's talk on 'Some of the most characteristic features of illuminated manuscripts from the 8th to the 18th century', given on 21 January 1857, which was prepared by Thomson and illustrated by manuscripts and early printed books from Tite's library as well as "by many other beautiful specimens from that of the London Institution",⁶¹ was duly printed for distribution to the proprietors.

There are few accounts of the soirees but those that are given are impressive. The Literary Gazette for 6 January 1849 describes the first soiree of the season at this "moble Institution". It was well attended and the library presented "a brilliant coup l'oeil and contained a highly interesting collection of art and of objects of natural history."⁶² At eight o'clock, the company adjourned to the theatre which was "filled to overflowing" and heard Gideon Mantell give a lecture on the fossil remains of extinct reptiles, which lasted an hour and a half and which was "listened to with the greatest attention."⁶³ Later in the same season, nearly 800 proprietors and visitors⁶⁴ listened to Smee talking on 'Electrobiology'.

56. See p.126,133,187.

57. See p.188 - 190.

58. See p.44,128,192.

59. See p.98,99.

60. Managers' Minutes, 9 July, 1865.

61. Annual Report for 1857.

62. Literary Gazette 6 January, 1849. p.24.

63. Ibid.

64. Illustrated London News Vol. 14, 14 April, 1849. p.243.

In February 1871, the managers decided to appoint John Ella⁶⁵ as professor of music at the Institution. At the same meeting, they decided that music should be included in the programme for the March soiree, to be played in the library after the lecture. It was Ella's task to organise the programme and eventually the soirees took the form of musical evenings. Such an evening was described in the Journal for December 1875 as consisting of a selection of instrumental and vocal music in the theatre directed by Ella, after which proprietors and their guests returned to the library where there was an exhibition of paintings, bronzes, pottery, jewellery and other works of art. The Journal of December 1876 announced that, in future, there would be an annual soiree which would take the form described above.

No further mention is made of soirees until 1907 when it was suggested at the annual meeting that social gatherings should be held in the reference library from time to time. Arrangements had been made for such gatherings when it was brought to the notice of the board by Messrs. Figgis and Wilson that it would be unsafe to impose the strain of a moving crowd on the library floor.

The Educational Lectures.

When the lectures were started, although they were intended to give instruction in various subjects, they were not described as 'educational', a term which was reserved for lectures which were directed at children and young people. The first course of lectures specifically stated to be for such an audience was 'On the progress of science', a course of eight lectures given by C.F. Partington⁶⁶ in 1825. Whether this course was a success or not is nowhere mentioned but, although Partington gave several courses of

65. See p. 132 note.

66. Charles Frederick Partington (d. ?1857). Scientific writer who described himself as "of the London Institution" in his books - to which the managers objected. He lectured on improvements in mechanics and on other subjects at Mechanics' Institutes. He edited and wrote many books on science and on the practical working of many trades. (D.N.B.; L.I. Managers' Minutes)

subsequent seasons, none of them was directed at a juvenile audience.

In 1854, three courses of 'educational lectures' were given on elementary chemistry, elementary biology and physical geography, each course consisting of twelve lectures. These courses were tried as an experiment. The following year, when they were continued, Alfred Smee,⁶⁷ who had been mainly responsible for their introduction, gave an introductory lecture 'On the objects and advantages of the educational courses connected with the London Institution'. This lecture, "in which the legitimate objects and advantages of this type of instruction were brought before the younger part of the audience in such happy and agreeable language",⁶⁸ was so well received that the managers decided to have it printed and to distribute copies to the proprietors.

The educational lectures continued for the next few years, always on scientific subjects, although ranging from conchology and the mollusca to terrestrial physics, but the managers were not altogether satisfied with the numbers attending. In 1860 they reported that attendance had varied between 100 and 200, with an average of 137, although attendance had been higher since the retiming of the lectures from 3p.m. to 7p.m. which suggests that the increase was due to a greater proportion of adults in the audience. Gradually the interests of the adult section seem to have become more important. The following year (1861), the board announced that the whole question of educational lectures was to be examined. These lectures were still fairly well attended but, by comparison, it was found that shorter courses, or those given by a well-known lecturer, were more popular. Some proprietors objected to the title 'educational lectures' and the board felt doubtful of their value to the proprietors.

67. See p. 44, 128, 192.

68. Annual Report for 1855.

No further mention was made of the educational lectures until 1869, when the annual report comments that, "The managers this year have renewed their efforts in the educational direction of the lectures and, in order to extend the area of their usefulness, have invited the attendance of pupils from the leading metropolitan schools."⁶⁹ During the 1868 - 9 season, a course of twelve lectures on elementary physical geography was given by T.H. Huxley.⁷⁰ The following season, three such courses were given on physics, chemistry and botany. The chemistry lectures, which were given by Odling, attracted "crowded audiences, comprising a large number of boys and girls from the schools of London and its suburbs",⁷¹ and were illustrated "by a series of brilliant experiments"⁷². After the lectures, examinations were held and prizes given to those who had gained the highest marks, although the practice of giving prizes was discontinued after 1874.

In addition to the courses leading to examinations, a short 'holiday course' of four lectures was started in the winter of 1871 - 2 by J.C. Brough⁷³ who lectured on 'The Philosophy of Magic.' The following two seasons both saw such holiday courses, given by H.E. Armstrong.

It is far from clear what the managers considered a 'good' attendance to be. Having been dissatisfied with an average attendance of 137 in 1860, they then reported in 1872 that the educational lectures had attracted large audiences: 30 had attended Huxley's course on elementary physiology and 38 had been to Odling's course on chemistry.

Gradually the number of lectures in the educational courses became

69. Annual Report for 1869.

70. These lectures formed the basis of Physiography: an introduction to the study of nature, published in London in 1877.

71. Nature Vol. 38, December, 1870. p118.

72. Ibid Vol.3, 15 December, 1870. p.139.

73. See p. 103.

fewer and they became 'afternoon lectures' with subjects not specifically directed at children. (Armytage Bakewell's⁷⁴ lecture on 'Cremation', for example, could hardly be described as a subject having particular appeal for them.) Lectures for children did not reappear until the 1886 - 7 season, when C. Meymott Tidy⁷⁵ gave three lectures on chemical action. He also gave a course of three lectures in 1888 - 9, when his series, 'The story of a tinder box, with experiments' was described as a 'Christmas course for juveniles'. These Christmas courses continued, rather irregularly, until 1912, with subjects varying from a course on soap bubbles by C.V. Boys⁷⁶ to a series on English cathedrals by Arnold Mitchell.⁷⁷

The Travers Lectures.

These lectures were so called because they were paid for by the interest obtained from the Travers Testimonial Fund. John Ingram Travers (1820 - 1866) who, from 1844 to 1863 was head of the firm of Joseph Travers and Sons, Ltd., sugar refiners, had been active in work connected with the reform of the Customs system. In recognition of this, he received a testimonial which realised £629-14-5d, and he decided that this money should be given for some useful purpose.

74. Proprietor of the L.I.

75. Charles Meymott Tidy (1843 - 92). Trained in medicine and law. Interested in public health. Was Professor of Chemistry, Medical Jurisprudence and Public Health at the London Hospital and reader in Medical Jurisprudence to the Inns of Court. Public Analyst and Deputy Medical Officer of Health for the City of London, Medical Officer of Health for Islington and official analyst to the Home Office. He was an expert on water supply and sewage treatment. In 1879 he published a paper on "The Process for Determining the Organic Purity of Potable Waters." - Tidy's Process.

76. Charles Vernon Boys (1855 - 1914). Physicist, educated at the Royal School of Mines. Between 1888 and 1890, he tried unsuccessfully to measure the heat radiated by stars. His determination of 'G' was reported in the Philosophical Transactions of 1895. He was elected F.R.S. in 1888. President of the Physical Society, 1916 - 17. His course on "Soap Bubbles and the forces which mould them", consisting of 3 lectures was published in 1890.

77. Arnold Mitchell (d.1944) Architect. His chief works were agricultural buildings for Cambridge University and Thomas Cook's head office in Berkeley St. Proprietor of the L.I.

The subscribers to the Travers Fund met on 2 August 1854 and agreed to put the money that had been collected into the hands of trustees who were to invest it in public funds. The interest was to be used for the delivery of a lecture, or lectures, on subjects connected with commerce or commercial law both of Britain and other countries. They also resolved that, " the London Institution, founded by merchants and bankers of the City of London, having on its management and among its members persons of the highest commercial position, being deeply interested in the advancement of commercial knowledge and having facilities as well for the attendance of the public at such lectures, as for securing their delivery by persons duly qualified for the task, be requested to receive and hold as trustees, the above sum and to appropriate the annual income arising therefrom to the delivery of such lectures."⁷⁸

There were generally two or three Travers Lectures every year although they were not always so indicated in the lecture programme, so that it is not possible to be certain as to the actual number given. From 1883 to 1885, none were given because, "The limitations on the subject of these lectures, as imposed by the Trust, render it exceedingly difficult to arrange for such lectures as will interest a general audience."⁷⁹ They were resumed in 1885, with a greater variety of topics, especially for those given to the continuing members after the London Institution Transfer Act of 1912.

After the Institution closed in 1933, the Travers Fund presumably lay idle until 1954, when the Governors of the City of London College,⁸⁰ which now forms the School of Business Studies of the City of London Polytechnic, were asked to assume responsibility for the Trust. Since that date, it has been used to provide short courses for commerce and management students of the School.

78. Minutes of special meeting of managers, 2 August, 1854.

79. Annual Report for 1885.

80. See also p.194.

Laboratory and Photographic Classes.

In December 1854, the managers announced that, with the intention of "rendering the laboratory of this Institution more usefully available",⁸¹ they had decided that, as an experiment, T.A. Malone,⁸² the director of the laboratory, should give a series of eight practical chemistry lessons during the Christmas holidays. The course would include the physical properties of matter, specific gravity, methods of weighing, construction of apparatus, preparation and testing of gases, filtration, crystallisation, and qualitative and quantitative analysis of compounds. The classes were intended for a limited number of young people, proprietors' families being given preference. Malone would charge a fee of one guinea for each pupil but the Institution would provide apparatus and chemicals free of charge.

Although they did not say so, it is probable that the managers took the idea of such laboratory classes from the Royal Institution, where, from about 1848 to 1853, laboratory lectures were given. These consisted of from twenty to twenty-five lectures on some aspect of chemistry.

The laboratory classes continued successfully for several years. On occasion, many more applied for them than the limited numbers at first envisaged and planned for and so two classes were formed, one to follow the other on the same day.

A further innovation was announced by the managers in June 1857. The laboratory committee was empowered to spend £150 on setting up a photographic room. This was completed early in 1858, when the managers authorised the spending of £50 to equip it. The room was directly under the control of the laboratory director, subject to the directions of the laboratory committee

81. Printed notice, 2 December, 1854.

82. Thomas Augustine Malone, see p.164.

and classes for teaching photography were planned. A course was to consist of eight lessons and proprietors, their families and anyone nominated by a proprietor could attend the classes on payment of one guinea. Proprietors who wished to use the photographic room for their own purposes could do so, using their own apparatus and chemicals, provided that the room was not being used for teaching.

According to the annual report in 1860, the chemistry class had only one vacancy and a second photographic class was being formed. In view of this, it is odd that the managers decided not to renew Malone's contract at the end of 1861, without giving a reason for their decision.

There is no evidence that Wanklyn⁸³ gave any laboratory classes while he was professor of chemistry but when Armstrong was appointed to the post, Nature announced that, according to the Pharmaceutical Journal, his appointment was "connected with a project for establishing practical chemistry classes in the laboratory of the London Institution."⁸⁴ The annual report of 1871 says that such classes were held on three evenings per week, were well attended and "the high character of the laboratory as a centre of scientific research as well as a school of chemistry has been maintained."⁸⁵ By 1874, the evening classes had lost their popularity and Armstrong reported that he had several proprietors' sons working as day students in the laboratory but that there had been no evening classes. Subsequent reports make no mention of any laboratory classes, day or evening, being held.

83. James Alfred Wanklyn (1834 - 1906). See p.167 - 170

84. Nature Vol. 3, 29 December, 1870, p.172.

85. Annual Report for 1871.

The Gresham Lectures.

The Gresham Lectures⁸⁶ were founded by Sir Thomas Gresham, merchant and founder of the Royal Exchange, who died in 1579. In his Will, he directed that, after the death of his wife, lectures should be given in his house in Bishopsgate Street, to be paid for out of the income from his estate. The Corporation of London was to appoint the lecturers in divinity, astronomy, music and geometry and the Mercers' Company was responsible for appointing those in law, physic and rhetoric. The professors appointed were to be resident in his mansion and Gresham College duly opened its doors in 1596. Although the building was not damaged by the Fire in 1666, other City buildings were and the Lord Mayor's apartments, the City courts and officers and the Royal Exchange were all moved to the College, thus reducing the accommodation for lectures and professors.

In 1768, an Act of Parliament was passed, transferring the grounds and building of Gresham College to the government for the site of the new Excise Office. The college building was demolished and the lectures transferred to a room in the Royal Exchange, where they were still held in May 1815, when the managers of the London Institution began discussions with the Gresham Committee on the possibility of moving the Gresham Lectures to the Institution. Charles Butler referred to the desirability of such a move in his speech following the laying of the foundation stone,⁸⁷ but in December 1815, the Gresham Committee decided that the removal of the lectures to the Institution would involve "the almost total departure from the original foundation of the Gresham Lectures."⁸⁸ and they were unable to agree to such a move.

86. For a general history of the Gresham Lectures, see: Peter Winkworth, A History of the Gresham Lectures. An Inaugural Lecture. City University 1966.

87. See p. 15, 66.

88. Gresham Repertory. Minutes of Meeting of Sub-committee for Gresham Affairs, 8 December, 1815.

There matters rested until March 1820, when the managers once more approached the Gresham Committee about moving the lectures to the Institution. Such a move would, they thought, bring mutual benefit. The room in which the Gresham Lectures were currently delivered held only 100 people, whereas that of the London Institution would hold 700. Indeed, numbers attending the current season varied from 400 to 700 and if the Gresham Lectures were moved to the Institution, similar attendance might be anticipated. This ought to lead to an improvement in the quality of the Gresham Lectures which would benefit the public. The Institution itself would benefit from "the remuneration which it may please your Committee to vote to the London Institution",⁸⁹ so that it could arrange for more lectures on chemistry, mechanics and other subjects not covered in the Gresham Lectures. Both the letter and the spirit of Sir Thomas Gresham's Will would, the managers thought, be fulfilled by this plan.

Unfortunately the Gresham Committee felt otherwise and wrote to the board saying that they were "decidely of the opinion that such removal would be neither desirable nor expedient and that the said lectures should continue to be read, as they always have been, upon the estate of Sir Thomas Gresham."⁹⁰

After this, the managers had no alternative but to let the matter drop. However, in November 1829, the situation was reversed when the managers received a letter from the Gresham Committee asking them to meet a deputation from the Committee. The managers accordingly appointed a sub-committee to meet the Gresham Committee's deputation. This sub-committee learned that the Gresham Committee had recently obtained the opinion of the Attorney and the Solicitor General and had ascertained that the lectures could be delivered anywhere within the City of London or its liberties. Moreover,

89. Managers' Minutes, 23 March, 1820.

90. Ibid, 5 July, 1820.

the Gresham Committee thought that the lectures might be more useful to the public if delivered in a more convenient place and that their delivery in the theatre of the London Institution would promote its objects and welfare as well as the public good.

The managers received the sub-committee's report with considerable satisfaction and resolved that arrangements be made to accommodate the Gresham Lectures in the theatre for one year as an experiment. Whilst the managers did not wish to derive any financial benefit from the arrangement, they felt that the Gresham Committee ought to make some contribution to the cost of giving the lectures. These included engaging additional porters during the delivery of the lectures, warming, lighting and cleaning the theatre, providing the lecturers with a room, and allowing for the additional wear and tear of the theatre furniture, which would amount annually to £150. The board also thought it desirable to have a separate entrance to the theatre, which would cost £25, so that members of the public attending the lectures would not have access to the hall, reading rooms and library.

When the two deputations met, that from the Gresham Committee proposed that their present porter should act as one of the additional porters and offered to defray the expenses of the lectures but objected to paying the whole cost of the additional entrance to the theatre, since the removal of the lectures was only experimental. The Institution's deputation agreed to pay half the expense of the alteration if the Institution decided to discontinue the lectures at the end of the year and also agreed to accept £135 as the annual payment from the Gresham Committee. It was also proposed that the Gresham Library, consisting of about 200 volumes should be removed to the Institution and that the Gresham professors should be allowed access to the library of

the Institution.

A special general meeting of proprietors was called on 15 January 1830, when an outline of the history of the Gresham Lectures was given, together with the details of the plan for moving the lectures and the library to the Institution. The meeting unanimously approved the arrangements made by the managers and agreed that they be carried into effect.

In the meantime, the Gresham Committee had decided to inform the professors of the proposed scheme and ran into difficulties. On 13 January 1830, the Committee was informed that the professors wanted more time to consider the arrangements, with the result that the Committee had to write to the Institution delaying the arrival of the lectures, which the managers had hoped to see installed by Easter 1830.

The professors maintained their delaying tactics until October 1830, when the opinion of the Attorney and Solicitor General was again sought. The Gresham professors opposed the move to the Institution because, they said, if the lectures were transferred, "there is great danger of their losing that distinction and becoming hereafter an appendage of the said London Institution."⁹¹ Also, they felt that the City of London and the Mercers' Company had "provided a proper and sufficient place for the delivery of their lectures at the Royal Exchange,"⁹² as well as accommodation for the library and "the professors having been in undisturbed possession of these premises for a great many years. . . . see no ground of reason whatever for their removal."⁹³ Counsel's opinion was that the Gresham Committee could not move the lectures without the consent of the professors.

91. Gresham Repertory: Minutes of Joint Grand Gresham Committee, 6 October, 1830

92. *Ibid.*, 7 December, 1830.

93. *Ibid.*, 7 December, 1830.

The whole scheme, therefore, had to be abandoned. However, when the managers of the Institution were making arrangements for the maintenance of the apparatus, the terms agreed were, "not to include any repairs or attendance on the Gresham Lectures in the event of their ultimate delivery",⁹⁴ so presumably the managers were nursing a spark of hope which must have been extinguished when, in 1841, the Joint Gresham Committee purchased some ground at the corner of Gresham Street and Basinghall Street for the purpose of erecting a new College.

It was over 70 years before any further suggestion of co-operation between the two organisations was made. On 6 October 1905, a meeting of the Joint Grand Gresham Committee heard a letter from Walter Scarborough, a manager of the London Institution and a member of the Gresham Committee, who had acted as chairman at a conference held on 3 July 1905, between the Institution's managers and a special committee appointed to consider the future of the Institution at a special general meeting. This letter enquired whether there was any possibility that an arrangement might be made to transfer the Gresham Lectures to the Institution on suitable terms but the Gresham Committee felt such a transfer to be undesirable.

In 1909, when the Institution was considering amalgamation with other organisations, including the Society of Arts, the managers received from the Town Clerk a copy of a resolution of the Corporation of the City of London to the effect that a special committee of the Corporation had been authorised to confer with various Corporation committees and the Gresham Committee to "consider if the citizens of London could in any way be benefited by an extension or alteration of the Gresham Trust and a working

94. Managers' Minutes, 9 June, 1831.

arrangement being entered into with the London Institution in lieu of the proposed amalgamation with the Royal Society of Arts."⁹⁵ A similar letter was sent to the Joint Grand Gresham Committee.

The Corporation did not wish the London Institution to amalgamate with the Society of Arts as it hoped to preserve the Institution for the City. The managers were prepared to delay action on the proposed amalgamation but pointed out that the Institution needed a much larger income to carry out all its objects. They were also prepared to consider any scheme which the Corporation's special committee might think suitable but needed some indication of what such proposals might be. One such proposal was that the Mercers' Company and the Corporation might acquire the Institution's property but all such schemes came to nothing with the appointment of the Royal Commission.

Despite these various plans, the Gresham lectures continued to be given in the College building on the corner of Gresham Street and Basinghall Street (which was demolished and rebuilt in 1912), until 1966. They are now given at the City University, St. John Street, Clerkenwell, under the auspices of the City University, although the trusteeship remains with the City of London and the Mercers' Company.

When lectures⁹⁶ were first given at the Institution, the managers evidently hoped to provide an educational service as well as entertainment for the proprietors. Courses of lectures on a variety of topics were presented, with the emphasis in the science lectures being on the practical applications.⁹⁷ These courses, which originally consisted of twelve, or even more, lectures,

95. Annual Report for 1909.

96. See Appendix V for the full list of lectures.

97. See p.127.

gradually became shorted and by the middle of the century were generally four to six lectures in length. Despite this change, the subjects dealt with do not seem to have changed very much, the number of lectures delivered during the season remained reasonably constant⁹⁸ and the total cost showed little variation,⁹⁹ except when courses of 'educational' lectures were given.¹⁰⁰

The educational lectures were given from 1854 until 1860, when doubts were expressed as to their value and also some proprietors objected to the use of the word 'educational'. They started again in 1869 and continued until 1874, after which they were replaced by afternoon lectures. The subjects of the educational lectures were generally scientific and, indeed, the proportion of scientific lectures in the total number of lectures remained reasonably constant, at around fifty per cent until the mid-1870s, after which it decreased to about forty per cent.¹⁰¹ The decline in the number of scientific lectures coincided with a drop in the total number of lectures given.¹⁰²

Over the years, the amount of money spent on the lectures shows quite considerable variation.¹⁰³ The 1821-22 season saw no lectures at all because finance would not permit their delivery. In general, however, during the 1820s, the cost of the lectures was high but the investigations of the 1829 committee of enquiry resulted in a sharp drop in expenditure, which then remained reasonably constant until educational lectures were introduced in 1854. The amount spent on lectures dropped when these lectures were discontinued after 1861 but rose again when they were resumed in 1869. During the last thirty years or so of the Institution's life, the average outlay on lectures gradually declined.

98. See Appendix VI, Table 1.

99. *Ibid.*

100. See p. 138

101. See Appendix VI, Graph 2.

102. See Appendix VI, Graphs 1 and 2.

103. See Appendix VI, Table 1 and Graph 3.

The problem of popularity was always present and the lectures on commerce and commercial law, which were financed by the Travers Trust,¹⁰⁴ posed a difficulty. Although it might have been supposed that such subjects would be of particular interest to the proprietors of the Institution, they did not have popular appeal and in 1885 it was decided to present a greater variety of subjects which would interest a general audience.¹⁰⁵

Like the activities of the library and the laboratory departments of the Institution, the lectures were affected by the variations in the financial state of the Institution. Nevertheless, the lectures were popular and well-attended¹⁰⁶ and an important part of the Institution's life.

104. See p. 141

105. See p. 142.

106. See p. 128, 134.



Plate VI. The Lecture Theatre.

Chapter 6

Scientific Activities.

When the first committee meeting under the Charter was held, on 4 February 1807, an apparatus committee of five members was set up to decide what scientific apparatus was needed and then to report to the managers. Four months later, the managers resolved that the apparatus committee was to order such apparatus as they thought necessary, provided they did not spend much more than £3000. No formal list of the apparatus purchased appears to be in existence but a manuscript list (not completely legible) which was compiled in 1807 suggests that the apparatus was intended for lecture-demonstrations. As well as models of pumps, water-wheels and steam-engines, the list includes optical apparatus, pneumatic equipment and a beam balance and weights.

The managers reported to the proprietors in 1808 that the apparatus committee had placed orders for apparatus for lectures in "Chemistry, astronomy, mechanics and the various branches of natural philosophy"¹, and it was hoped that it would be ready for the following winter. A list, written out in 1808, of the apparatus that had been delivered to the Institution, included sets of models of pumps, a battery, an air thermometer and some sets of bells, but otherwise consists of electrostatic apparatus, most probably for demonstration purposes.

According to the 1811 report, nearly £2,300 had been spent on apparatus and although this did not reach the limit of £3,000 which had been set, the managers decided in December 1811 not to order any more, but gave no reason for this, although it may have been to avoid unnecessary difficulties in the move to the new premises in King's Arms Yard. By the time this move had been

1. Annual Report for 1808.

accomplished, the financial position was causing concern and the Institution still had no lecture theatre. The managers therefore decided not to order any more apparatus until "a more definite prospect arises of rendering it useful for the delivery of lectures."²

When the 1812 committee of enquiry was investigating the finances of the Institution, it naturally included the purchase and maintenance of the apparatus in its investigations. These were quite considerable items in the budget because not only had a large sum been spent on acquiring apparatus but also an instrument-maker was being employed at a salary of £150 to look after it. The investigating committee suggested that an optician be paid about £20 per year to maintain it until it could be brought into regular use. The committee also recommended that some of the more expensive instruments could be sold as they would be of no use even when the lectures were given.

Among the apparatus that the committee thought should be sold was a transit instrument, a Herschel 10 foot reflector, a Gregorian 2 foot reflector, an astronomical clock, an Archimedean spiral, a weaver's loom and a theodolite complete with staff. However, the managers later decided not to sell any of these items.

Apart from the lists already mentioned, the only way to find out what apparatus the Institution possessed is from mention of items borrowed at various times. For example, on 12 August 1813, the board was informed that the Astronomer Royal wished to borrow the Institution's reflecting telescope. A similar one had been ordered for the Royal Observatory but it would not be ready for some months. The managers accordingly agreed to the loan. A similar request was made in February 1814, when William Brande³ wrote asking

2. Annual Report for 1812.

3. See p.125 note.

to borrow the steam engine belonging to the Institution.

The laboratory of the Finsbury Circus building had been designed by W.H. Pepys⁴ and was rather irregular in shape, about twenty feet long and twelve feet wide, situated close to the lecture theatre and reached through a door to the rear of the lecturer's table.⁵ It was lit by a skylight and artificial illumination was provided by a gas light. The work bench was placed underneath the skylight. Several furnaces, ovens and stills were ranged along one wall of the laboratory, while racks and shelves for apparatus and reagents were constructed against the other three walls. The laboratory had a sink with water supply and most of the apparatus in it was also designed by Pepys.

Although no formal appointment was made to a full-time scientific post before Grove⁶ became Professor of Natural Philosophy, some scientific work was carried out in the laboratory, mainly by W.H. Pepys. Soon after the opening of the laboratory a battery designed by Pepys was in use. It consisted of 2,000 double plates 4 inches square in 1168 parts water, 108 parts nitric acid and 25 parts sulphuric acid. The battery was contained in 200 porcelain troughs, each trough containing 10 pairs of plates. It was with this battery that Davy produced "a column of fire from one to four inches in length",⁷ which illuminated the whole of the lecture theatre (presumably of the Royal Institution). It was in use from July, 1819 until 1835 when "it was virtually destroyed by the action of the acid on the plates."⁸

4. William Hasledine Pepys (1775 - 1856) See Appendix I and also p. 16.

5. See Plate VII the laboratory, also Plate II area N on ground floor plans.

6. William Robert Grove (1811 - 1896) See p.160 - 163.

7. Phil. Trans. 1821, III p.7.

8. Introductory Preface to Library Catalogue 1835.

In 1823, Pepys designed a single cell each plate measuring 50 feet by 2 feet, rolled round a cylinder of wood with three strands of horse-hair between each plate to prevent contact between the plates. The cylinder was suspended on ropes and pulleys so that it could either be immersed in a tub of dilute nitric acid or in a tub of water when it was not in use. Pepys used this cell in experiments to investigate the magnetic effects of an electric current. It was also used by Davy in his investigations on the rotation of a wire by a magnet which were described in a paper read to the Royal Society in 1823.

Nevertheless, despite Pepys' activities, the managers hoped that a time would come when they would be able to "establish a chemical operator in the laboratory whose duty it will be to examine those paths of discovery which are constantly opening to view and which, by their results may become interesting not only as objects of laudable curiosity, but of vital importance to the progress of arts, manufactures and commerce."⁹

It was, however, some years before the matter was raised again. In June 1831, the managers decided to call a joint meeting of the library and general purpose committee to investigate the question of appointing a permanent professor to take charge of the laboratory and apparatus. These two committees produced a report which recommended the appointment of a professor, to which the managers agreed. It was then referred back to the joint committees to consider the practical details of such an appointment. In the meantime, Mr. Styles was to be employed to look after the apparatus on the following terms: £20 per year for attending the lectures and £25 for looking after the apparatus room and providing materials such as black

varnish, black lead, oil and emery which might be required. As we have seen, it was specifically stated that these terms were not to include any repairs or attendance on the Gresham lectures in the event of their ultimate delivery at the Institution.

No further action was taken on the matter until late in 1840, when the managers appointed a special committee to consider the terms of employment of a professor, together with the probable annual cost and suggestions as to how funds could be raised to pay him and to defray the expenses connected with the appointment.

This special committee calculated that the annual cost of a professorship of experimental philosophy would be:

Annual salary	£100
Laboratory expenses, limited to	£ 50
Lecture and laboratory assistant	£ 52
Coals and candles	£ 5
Total	£207

These costs could be met in the following ways:

By abolishing the post of assistant to the lecturers and keeper of the apparatus	£63
Annual saving of a course of chemical lectures (say)	£70
Saving by limiting the cost of books, binding, newspapers, etc. to the sum of £630 p.a. (Average cost over the past eight years having been £686)	£56
Extraordinary expenditure or balance	£18

Giving a grand total of £207.

The professor should be required to give courses of lectures on experimental philosophy as the managers directed and at the first soiree of

the season would give a lecture on some recent scientific discovery. He was to be responsible for looking after the Institution's apparatus and for buying further apparatus and chemicals that the laboratory committee thought necessary. In addition, he was to attend all board meetings, give a monthly report on research activities as the librarian did for the library and to make a similar report to the annual general meeting. His hours of attendance at the Institution were to be "from 10 to 12, from Tuesday to Friday inclusive, except in the vacations at summer and Christmas." Finally, the appointment should be made on a yearly basis.

The duties of the laboratory and lecture assistant were to look after the apparatus and chemicals and keep the laboratory tidy, as the professor directed. He was also to attend all the lectures and give any assistance that the lecturers needed. His hours of work were to be from 9a.m. to 8p.m., except on lecture or soiree nights when he would remain as long as the managers thought necessary. If he was not needed in the laboratory, he was to assist the hall porter. His salary was to be twenty-six shillings per week.

In December 1840, the managers decided to consider the applications for the professorship in the following February and also that Mr. Styles should be informed that his appointment would cease with the current courses of lectures but that he would be at liberty to apply for the post of laboratory assistant - which he declined to do.

When the managers met in February to consider the nomination of the professor of experimental philosophy, they decided that his vacations should be three months in the summer and a fortnight at Christmas and that the number of lectures he was to give should not exceed twelve, except for a preliminary lecture at one of the soirees. However, if the Institution was let down by one of the other lecturers, the board could call on the professor

to give a lecture instead, provided that reasonable notice was given. The managers then nominated William Robert Grove, F.R.S. to the professorship, (no mention is made of any other candidates) and he was duly elected on 18 March. The next week, George Thomas Fisher was appointed laboratory assistant.

The annual report to the proprietors in 1841 announced Grove's appointment and also the managers' hopes of obtaining "a more systematic, detailed, progressive elucidation of the principles of physical research and to cooperate or compete with other scientific bodies in the patient investigations of a well-conducted laboratory."¹⁰

William Robert Grove (1811 - 1896)¹¹ was educated at Brasenose College, Oxford and had returned to science from law because of ill-health. He had been called to the bar in 1835 and became a member of the Royal Institution in the same year. He soon gained a reputation in scientific circles, particularly with the development of the Grove Cell, which was an improved form of primary cell, designed to give a high E.M.F. with moderate internal resistance, free from polarisation. It was used to give heavy currents and it was a battery of these cells, together with incandescent lamps with platinum filaments, which he used to illuminate the theatre of the London Institution at one of his lectures. No date is available for this but as the last time Grove lectured at the Institution was in 1856 it was long before the work of Swan and Edison on electric lighting using filament lamps¹² (1879). In fact, the most probable occasion for such a striking demonstration is the soiree in 1844 entitled 'On a powerful voltaic combination, (Grove's Battery)'.

10. Annual Report for 1841

11. D.N.B.; Dictionary of Scientific Biography; Encyclopaedia Britannica 11th edn. p.638 (Section on W.R. Grove.)

12. Encyclopaedia Britannica, 11th edn., also: K.R. Webb, Sir William Robert Grove (1811 - 1896) and the Origins of the Fuel Cell. Journal of the Royal Institute of Chemistry Vol.85 August 1961, 291 - 293.

Grove gave a full account of his cell in the Philosophical Magazine in 1839, which later, in 1842 and 1843, contained a sharp exchange of letters between Grove and J.F. Daniell, in which Grove denied that the development of the Grove Cell owed anything to Daniell's work¹³.

It was also in 1839 that Grove published, once more in the Philosophical Magazine, a note on 'The Synthesis of Water by Voltaic Action.' This short note contained the observations which were the basis of his work on the fuel cell, his 'gas battery' as he came to call it. In the following year, he was elected F.R.S.

Grove's first lecture at the London Institution was the soiree mentioned above on the Grove Battery on 20 January 1841, before he was appointed to the professorship. He next gave a course of four lectures on magnetism in November of the same year, a course of four lectures on the four elements in January 1842 and a soiree on 19 January on 'Progress of Science since the building of the London Institution'. This last lecture was very well received by the proprietors, twenty of whom signed a memorial requesting that the lecture be printed and distributed among them. The theme of this soiree was further developed in a course of six lectures given in 1843, entitled On the Correlation of Physical Forces. These lectures formed the substance of the material for Grove's book of the same title which was published in 1836. It went through five more editions and new material was added to each one. The work was an early statement of the principle of conservation of energy which was described by others, including Mohr, Liebig and Faraday, all between 1837 and 1844.

In March 1842, the managers re-appointed Grove for the following year.

13. Phil. Mag. 15 (1839), 287 - 293; 20(1842), 294 - 304; 21(1842), 333 - 335; 421 - 422; 22(1843), 32 - 35.

They expressed their satisfaction with the professor, "whose skill and industry form a most gratifying confirmation of the wisdom of their appointment",¹⁴ even though unspecified difficulties had stood in the way of forming a school of experimental philosophy in the Institution. Grove reported that during the past year, experiments on etching daguerrotypes by voltaic electricity had been carried out in the laboratory with J.P. Cassiot's¹⁵ help as well as other researches not yet ready for publication.

The successful result of these researches was communicated to the managers in June 1843 when Grove was "happy to have to report a discovery which has attracted some attention among men of science and which will, I trust, do no discredit to the laboratory of the London Institution, namely, the gas-battery"¹⁶

Meanwhile, Grove's legal practice, which dealt mainly with patent cases, was increasing and when the managers came to consider his appointment for a further year in March 1845, they were told that, "he felt some difficulty as to his ability to perform the duties of Professor during the whole of the ensuing year but would be happy to accept the appointment subject to his being at liberty to resign it at the same time of the arrangement of the lectures." It was unanimously resolved that he be re-elected but he resigned at the end of the year.

Nevertheless, he maintained his contact with science and was a member of the Council of the Royal Society in 1846 and 1847, one of its secretaries in 1848 and 1849 and played an important part in the movement to reform the Society. He did not entirely sever his association with the London Institution

14. Annual Report for 1843.

15. John Peter Cassiot (1797 - 1877). See p.191.

16. Managers' Minutes, 8 June 1843.

either, as he was elected an honorary member of the Institution in July 1846 and also became a member of the laboratory committee. He lectured at soirees from time to time and became the Institution's standing counsel in 1864.

In the meantime, the laboratory assistant, G.T. Fisher, had resigned in May 1854, because of ill-health. The managers awarded him 5 guineas as an acknowledgement of the work he had done whilst in their employment. His successor, Bingham, resigned in February 1848, when the managers decided that the duties undertaken by the laboratory assistant should be widened and that the post should be renamed 'Laboratory and General Assistant'. In addition to looking after the laboratory and apparatus, the new assistant would be expected to clean the lecture theatre and see that it was properly prepared for lectures and also to do any repairs and odd jobs that the managers required. The salary was to be thirty shillings a week and the board appointed G.H. Taylor to the post.

After Grove's resignation as professor a delay in appointing someone to take his place occurred possibly because Cassiot hoped that Tyndall would accept the post, as is clear from Tyndall's correspondence with Henry Bence-Jones.¹⁷ The Royal Institution offered him a salary of £200 and although definite mention was made of what the London Institution might offer, if the salary of Malone, Wanklyn and Armstrong is considered, it would probably have fallen short of that amount. On the other hand, Tyndall thought "I believe I might have £200 a year, an assistant, laboratory and £50 yearly

17. Tyndall Papers at R.I. Correspondence Vol.II Items 671,677,678, VolIX Items 237,2858,2859,2871. John Tyndall (1820 - 93) had been employed in the Ordnance Survey but in 1847 became teacher of mathematics at Queenwell School, Hampshire. In 1848, he attended Bunsen's lectures in Marburg and was awarded his Ph.D. in 1850 for research on electricity and magnetism. He was elected Professor of Natural Philosophy at the R.I. in 1853 and, on Faraday's death in 1867, became Superintendent of the Institution.

for experiments at the L.I. and should only have to deliver 7 lectures during the year. But Faraday, I believe, is anxious to have me at the R.I.",¹⁸ and he accordingly accepted the Royal Institution post.

Instead of appointing a professor, the managers, in 1854, announced the appointment of Thomas Augustine Malone,¹⁹ as Director of the Laboratory. Malone had been associated with H. Fox Talbot in the development of some of the early photographic processes. He had been a student at the Royal College of Chemistry in 1851 and, after 1852, had taught photography at the Royal Polytechnic Institution in Regent Street. While he was employed at the London Institution, the main emphasis was on laboratory teaching rather than research. Although the photographic room that was set up in 1858 was supposed to be used for "scientific photographic investigations",²⁰ as well as for teaching purposes, any such investigations were to be carried out only when the room was not being used for teaching and from the records it would appear that the room was mainly used for photographic classes.

Both the laboratory and photographic classes seem to have been popular but in their report for 1862, the managers announced that they had reconsidered the laboratory arrangements and had therefore ended their contract with Malone. However, they hoped to make arrangements to "restore the importance of this department of the Institution."²¹

In order to do this, the managers appointed a special committee in May 1861 to consider the whole question of the use of the laboratory and all

18. Tyndall to Thomas Archer Hirst, 14 April 1853, (Tyndall Papers at R.I.) Vol.IX Item 237.

19. Register of Associates and Old Students of the Royal College of Chemistry, etc. : Gernsheim and Gernsheim, The History of Photography.

20. Managers' Minutes, 14 April, 1858.

21. Annual Report for 1862.

matters connected with it. This committee, which included Warren de la Rue, Alfred Smee and J.P. Cassiot, recommended that the board continue the current arrangements for the laboratory until the end of the year, when the contract with Malone expired and that Malone should be given legal notice to that effect. Presumably after leaving the Institution, Malone returned to his photographic work as he submitted papers on his work to the Photographic Society Journal up to 1864.²²

In October 1861, the board received three letters of application for the post of director of the laboratory in succession to Malone but in December the managers decided to defer any such appointment.

The special committee, which had been appointed the previous May, met on 14 April 1862 and recommended that a professor of chemistry should be appointed. He should deliver a course of fifteen lectures on chemistry each year so that, over a few years, the entire subject would be covered. He should be responsible for the care of the laboratory and apparatus but should also devote much of his time to laboratory work and the Institution would therefore provide facilities to aid original research. The appointment could be terminated by the managers at any time by giving six months' notice or on payment of six months' salary, the salary to be fifty guineas a year.

Frederick Field (1826 - 1885)²³ was appointed to the post in May 1862 but resigned the following November. He proposed, however, that he should deliver the course of lectures that had been arranged, to which the managers agreed.

22. Malone's Papers include: Roy. Inst. Proc. II 1854 - 58 p.69 - 350. On the application of light and electricity to the production of engravings - photogalvanometry. 2. Photog.Soc.Journ. III 1857 p.136-138; 158-160; 203-4. Lectures on Photography (1856) 3. Photog.Soc.Journ. VII 1862.p.38-9. On an alleged new property of Light. 4. Photog.Soc.Journ. VIII 1864 p.179-181. The composition of the photographic image.

23. D.N.B.; F. Boase, Modern English Biography.

Before his appointment to the professorship, Field had spent much of his time abroad. He had been a student at the Royal College of Chemistry from 1846 to 1848 when he became chemist to a copper smelting works at Coquimbo, being promoted to manager in 1852. He then acted as British vice-consul at Caldera, near Coquimbo from 1853 to 1856 before being appointed chemist and sub-manager to a smelting works at Guayacan. In 1859 he left Chile for England and the following year became lecturer on chemistry at St. Mary's Hospital, London. He resigned from the London Institution to become chemist at the aniline colour works of Simpson, Maule and Nicholson, a post he held until 1866 when he became a partner in the family firm of J.C. & J. Field; candle-makers.

At the same meeting which saw the appointment of Field as professor of chemistry, the managers decided to refer the question of appointing a professor of botany to the same special committee. This committee met on 11 June 1862 and recommended the appointment of Robert Bentley as professor of botany. His duties should be to give annual courses of lectures at three guineas per lecture, an arrangement which could be terminated by the board at six months' notice. Bentley's appointment was confirmed by a meeting of managers later that day.

Robert Bentley (1821 - 1893)²⁴ was professor of botany and the natural history of drugs to the Pharmaceutical Society, lecturer on botany at the London Hospital and professor of botany at King's College, London. In 1847 he was elected M.R.C.S. and F.L.S. two years later. He was one of the first associates of the Pharmaceutical Society, edited the Pharmaceutical Journal for ten years and was president of the British Pharmaceutical

Conference in 1866 - 7. For many years he was chairman of the garden committee of the Royal Botanical Society. He lectured regularly at the London Institution until 1885, giving educational lectures²⁵ and, later, afternoon lectures.

By the time the managers met on 10 December 1862, they had received Field's resignation. They decided to refer the matter of the professorship of chemistry to the special committee, which felt that it was desirable to continue the professorship and, having examined the regulations governing the appointment, could see no reason for altering them, so suggested their readoption.

The managers accepted these recommendations and resolved that the regulations should be written out and handed to Thomson, the librarian and that candidates should be requested to call at the Institution to read them. Candidates were to be informed that the appointment would be subject to these conditions and also that "ability in public lecturing is a qualification much required."

On 11 February 1863 the board met to appoint a professor of chemistry and read applications from Messrs. Arthur H. Church, B.A., F.C.S., W.J. Russell, Ph.D., F.C.S., B.H. Paul, Ph.D., and J. Alfred Wanklyn, M.R.C.S. When the vote was taken, Wanklyn was declared elected, subject to his acceptance of the conditions of service which he had previously examined.

James Alfred Wanklyn (1834 - 1906)²⁶ duly accepted the post, gave several series of lectures and pursued chemical research in the laboratory. The latter activity produced side-effects that the managers had not bargained

25. See p. 138-141.

26. D.N.B.; J.A. Wanklyn, Water Analysis 11th edn. revised by W.J. Cooper.

for because, before long, they resolved that no experiments were to be carried out in the laboratory on days when there were lectures in the theatre because of the disagreeable odours which found their way into the theatre - a complaint which was to recur during Armstrong's time.

Before his appointment at the London Institution, Wanklyn had trained in medicine and became M.R.C.S. in 1856, although he never practised. He also studied at Owens College, Manchester and began his chemical studies under Frankland. Later, he went to Heidelberg for two years, after which he became a demonstrator in chemistry at Edinburgh where he carried out chemical investigations in conjunction with Lyon Playfair. He stayed in Edinburgh for about three years and then returned to Heidelberg for some months in 1862.

While at the London Institution, Wanklyn discovered a purple dye made from glycerine and rosaniline and also worked on the production of organic compounds from inorganic materials, a problem which had interested chemists for some years. Most of his researches were published in the Journal of the Chemical Society under the heading 'Contributions from the laboratory of the London Institution'. In 1867 he was presented with a delicate balance from the grant made to the Royal Society by the government. Later he began working on the problem of determining the purity of drinking water in which he was associated with E.T.Chapman and Miles H. Smith, who were working with him in the Institution's laboratory. His so-called 'ammonia process' was brought before the Chemical Society and in June 1867, he was summoned to appear before the Royal Commission on Water Supply, which was then sitting in the House of Lords, to explain his method of detecting organic impurities in water.

He collaborated with E.T. Chapman in producing Water Analysis: A Practical Treatise on the Examination of Potable Water, which was first published in 1868. It went through several editions, the third in 1874 after Chapman's death in a laboratory accident; the tenth appeared in 1896 and was translated into both French and German; the eleventh came out in 1907 and contained a portrait and memoir of Wanklyn.

Wanklyn's method of water analysis aroused considerable controversy but he always insisted on the value of his process. In the memoir by W.J. Cooper in the 1907 edition of Water Analysis, it is stated that the strong feeling that was caused by the controversy of the 'ammonia process' prevented his election to the Royal Society and he refused to apply again. Whether this is true or not, except for his honorary membership of the Edinburgh Chemical Society, he did not belong to any scientific society in Britain; his only other membership of a scientific society was that of corresponding member of the Royal Bavarian Academy of Sciences, to which he was elected in 1869.

His position at the London Institution took an odd turn in May 1868, when the managers decided that the laboratory committee should consider the cost of the professorship of chemistry and the laboratory expenses and report back to the managers. The next month, the board resolved that "... arrangements be made by which the professor of chemistry shall have the cost of chemicals included in his honorarium of £52-10-0 and be relieved from the duty of lecturing.",²⁷ this latter provision being contrary to the requirement that public lecturing was important at the time of his appointment.

This decision was communicated to Wanklyn who, rather surprisingly,

27. Managers' Minutes, 10 June, 1868.

accepted the revised terms. Despite this, in March 1869, the board decided to give him six months' notice to terminate his contract. It is clear that Wanklyn was far from happy about his post at the Institution and in August 1869 told Liebig that he had been "working under great difficulties for the last six years".²⁸ Rather bitterly, he wrote that the Institution's laboratory had "closed its career as a laboratory of chemical research and is I believe to be applied, as the managers of the Institution will doubtless express it, 'to more useful purposes'".²⁹ Nevertheless, the following month he submitted a scheme for chemical instruction in the laboratory but, although the managers accepted this scheme, he left the Institution at the end of 1869.

Exactly what caused the change for the worse in Wanklyn's conditions of employment and his eventual dismissal is not stated. Perhaps the managers felt that he was too controversial a figure to be associated with the Institution, especially when he was giving public lectures in the Institution's theatre. Or they may have decided that he was spending too much on chemicals and giving too much time to his own research rather than teaching laboratory classes, which may account for the scheme for chemistry classes which he devised before he left the Institution.

After leaving the Institution, he was variously public analyst for the boroughs of Buckingham, Peterborough, Shrewsbury and High Wycombe and from 1877 to 1880 lectured in chemistry and physics at St. George's Hospital. During the latter part of his life he lived at New Malden, Surrey, where he practised as an analytical and consulting chemist.

Immediately after Wanklyn's departure, the managers decided that

28. Letter from Wanklyn to Liebig, 19 Aug. 1869, from "Liebigiana 58", Bayerische Staatsbibliothek, Munich.

29. Ibid.

before any steps were taken to fill the vacant professorship, the whole question should be considered, particularly with educational teaching in mind, a change of heart from the time of Grove's appointment, when the managers seem to have envisaged a sort of research 'competition' with other institutions.

The laboratory committee's report on the matter was presented at the end of 1870. It says that, "Throughout these appointments, delivery of lectures as one of the usual annual courses appears to have been sought as the principal object and , except in the case of Mr. Field, whose connection with the Institution only lasted one season, this seems to have been a failure ever since the retirement of Mr. Grove",³⁰ which was rather unfair, since Malone regular courses of lectures and so did Wanklyn until relieved of that duty.

In future, laboratory work and laboratory teaching should be the main considerations in the appointment of a professor and "the capacity to lecture be entirely secondary and subordinate."³¹ A salary of fifty guineas would be sufficient to give the Institution control over the appointment and with new public awareness of the importance of education, there ought to be no difficulty in recruiting students for laboratory classes. The tone of the report implies that fees would be paid to attend such classes, which would supplement the somewhat meagre salary paid by the Institution. Finally, it was not even necessary to "incur the expense and trouble that would be involved in public advertisement"³² as several applications for the post had already been received.

30. Managers' Minutes, 21 December 1870.

31. Ibid.

32. Ibid.

The report then proceeded to list the new conditions of employment. The professor was to have the use of the laboratory " . . at all reasonable hours."³³ as well as the use of the apparatus and chemicals, although if he required any apparatus or chemicals for his own use, he must pay for them himself. He also had to take pupils in the laboratory and set up classes, for whose instruction he was allowed "occasional use of the theatre."³⁴ The professor's activities were to be totally under the control of the managers, who would decide what fees were to be charged to pupils. All these arrangements and the appointment could be terminated at any time on three months' notice and finally, rather grudgingly it seems, the professor would be allowed to have "the services of the laboratory assistant when not wanted in the other duties he has to fulfill in the house."³⁵

From this it appears that the managers were determined not to find themselves financing scientific research, for which they had little sympathy. This change of direction, together with the apparent determination to make the laboratory pay for itself, may have been the main reason for Wanklyn's dismissal.

At an adjourned meeting on 21 December 1870, the managers agreed to these unattractive conditions of employment and also appointed Dr. Henry Armstrong as professor of chemistry.

Henry Edward Armstrong (1848 - 1937)³⁶ had studied at the Royal College of Chemistry and while in his third year there he started research under Edward Frankland, working on water analysis methods which were used by

33. Managers' Minutes, 21 December 1870.

34. Ibid.

35. Ibid.

36. D.N.B.; Dictionary of Scientific Biography; J. Vargas Eyre, Henry Edward Armstrong, 1848 - 1937. Journal of the Chemical Society, 1940 p. 1418 Obit. of Armstrong.

Frankland for his survey of the whole of Britain's water supply. At Frankland's suggestion he then went to Leipzig to study under Hermann Kolbe. He was awarded his Ph.D. in 1870 and returned to London in the same year. Also, in 1870, he submitted his first paper 'On the formation of sulpho-acids' to the Chemical Society. He was elected F.R.S. in 1876.

When Armstrong took up his post at the London Institution, he continued his chemical researches, gave lectures and held laboratory classes. It may be that it was while he was teaching these classes that he developed his ideas on arranging simple experiments, to demonstrate basic scientific principles, which his pupils could perform for themselves, which was the basis of his 'heuristic' method of teaching science.

Unfortunatley he soon discovered "the want of apparatus and appliances for the adequate illustration of the lectures."³⁷ He suggested that this lack might be mentioned to the proprietors "in the hope that they may be induced to establish and contribute to a fund for the purchase of such articles as an electric lamp and other instruments which the present state of science renders indispensible and which now have to be hired from time to time at considerable expense."³⁸

Following these complaints, a committee consisting of Warren de la Rue, William Huggins and Armstrong was appointed to examine the apparatus. They reported that the collection of apparatus was very limited and that most of the items were so old as to be of comparatively little value. It consisted almost entirely of apparatus for demonstrating mechanics and electrostatics, all of which ought to be kept as it would be useful for lecture purposes. They recommended that "the entire stock of astronomical

37. Annual Report for 1873.

38. Ibid.

instruments, together with the theodolite, a balance by Troughton, microscope and solar microscope and steam engine be sold and the amount realised be devoted to the purchase of an electric lamp and appurtenances and, if sufficient, other physical apparatus."³⁹ Perhaps as a result of this investigation, Warren de la Rue, the president, donated £100 for the purchase of apparatus.

Armstrong also found, as Wanklyn had done, that it was impossible to prevent "disagreeable odours inseparable from the laboratory" escaping into the rest of the building. A draught chamber had been installed in 1871 which had improved the atmosphere in the laboratory and given increased working space but the trouble could not be fully cured because the laboratory was old-fashioned and not suited to the demands being made on it but mainly because of its "unfortunate position. . . immediately behind the lecture theatre."⁴⁰ What was really needed was the complete separation of the laboratory from the lecture theatre. This, Armstrong thought, could be "accomplished with a small outlay in a perfectly satisfactory manner."⁴¹ A description exists of a proposed laboratory to be erected at the Institution at a cost of £310.⁴² Whether this was done at Armstrong's instigation or the managers' is not known although, bearing in mind Armstrong's remarks on alterations needed, the managers' unsympathetic attitude towards research and the fact that there is no mention of possible rebuilding of the laboratory in the minutes, it is almost likely that Armstrong hoped for such a laboratory but was doomed to disappointment.

In June 1877, Armstrong suggested that his honorarium should be

39. Managers' Minutes, 11 November, 1874.

40. Laboratory Report, 1872.

41. Annual Report for 1873.

42. Armstrong Papers, Item 437, at Imperial College.

raised to £100. This was not entirely wishful thinking as the previous year the librarian had had his salary raised by £100 and the salary of each of the sub-librarians had been raised by £25. He was informed, however, that the financial state of the Institution would not allow such a rise.

However, Armstrong continued to work at the Institution, although the laboratory classes declined in popularity. In 1883 he received a letter from the managers informing him that after Christmas of that year, they would cease to pay him and his laboratory assistant, although they wished him to continue as professor of chemistry and to continue to use the laboratory. Armstrong agreed to the se changes and said that he had some work in progress in the laboratory which he wished to complete and "the other laboratory with which he is now connected is not in a sufficiently complete state for carrying on such investigations."⁴³ Until his investigations were complete he would continue as professor and to make use of the laboratory.

The "other laboratory" was at the City and Guilds of London Institute in Finsbury College in Cowper Street, which later moved to South Kensington. Armstrong finally resigned his post at the Institution in December 1884, although he did not immediately remove his apparatus from the laboratory. No further appointment was made to the professorship of chemistry after he left.

In December 1883, Alfred Tylor, one of the managers, wished to have a professorship of anthropology established, hoping that Sidney Skertchly, who had lectured at the Institution, would be appointed, but the managers did not act on the suggestion. The following month, January 1884, the managers received an offer from a Mrs. Browne to endow a professorship of biology but this the managers declined as "the board cannot, under any

43. Managers' Minutes, 11 July, 1883.

circumstances, accept of money if hampered by special conditions."⁴⁴

With the end of scientific activity at the Institution, all the apparatus appears to have been sold. According to a minute paper, now at the Science Museum, "all the scientific apparatus used. . . by Justice Grove, Henry Armstrong and others was sold many years ago when the Institution ceased to be much interested in science."⁴⁵ Also according to this paper, the only piece of apparatus left in the place was a 'secret battery', contained "in an oriental carved cabinet arranged so that when one touches two knobs all the bells in the place ring."⁴⁶ (What use this device might be is hard to imagine - it sounds too exotic for a fire-alarm.)

However, there are three pieces of electrostatic apparatus from the Institution in the Science Museum. They are: a condensing electroscope, a Nicholson's revolving doubler, both made by Bate and a Cavallo's electric multiplier, all of which were presented in 1890.

As has been seen, the laboratory activities of the Institution did not begin until the laboratory in the Finsbury Circus building was completed in 1819 and even then, it was not until 1841 that W.R. Grove was appointed professor of natural philosophy, the first scientific post at the Institution. At the time of Grove's appointment, the managers expressed their hopes of co-operation or competition in research with other scientific institutions,⁴⁷ and they were proud of the work that Grove did. After his resignation from the professorship, he was elected an honorary member of the Institution and served on the laboratory committee.⁴⁸

No further appointment was made to the laboratory until 1854, when

44. Managers' Minutes, 11 July, 1883.

45. Science Museum Minute Paper, 21 January, 1913.

46. Science Museum Minute Paper, 21 January, 1913.

47. See p.160.

48. See p.163.

T.A. Malone was engaged as director of the laboratory.⁴⁹ The emphasis in this post was on teaching rather than research and Malone gave regular lectures and held laboratory classes, especially in photography.

Malone's contract was terminated rather abruptly at the end of 1861 and the managers decided to appoint a professor of chemistry, who would be expected to do research.⁵⁰ Frederick Field⁵¹ was the first person to be appointed to this post but he resigned after seven months, so that J.A. Wanklyn was the first to hold the post for any length of time. He gave lectures and pursued research but, like Malone, was rather abruptly dismissed.⁵²

The professorship of botany, which was instituted in 1862,⁵³ was held by Robert Bentley who was required to give courses of lectures each year but was not expected to carry out laboratory research. The post was therefore really a requirement to give lectures over a series of years without the necessity of being re-engaged for each season.

After Wanklyn's departure, the managers once more seem to have had a change of mind about what they required from their professor of chemistry, as they were now more interested in laboratory teaching.⁵⁴ They also seemed concerned about the amount of control they could exercise over the professor's activities.⁵⁵

From 1870 to 1883, H.E. Armstrong held the post, giving laboratory classes and carrying out research in the laboratory, despite the difficulties

49. See p.164.

50. See p.165.

51. See p.165.

52. See p.170.

53. See p.166.

54. See p.171.

55. Ibid.

caused by an out-of-date laboratory. In 1883, Armstrong was informed by the managers that, after Christmas of that year, he would no longer be paid his 50 guineas per year,⁵⁶ but that the managers hoped that he would continue as professor of chemistry and to work in the laboratory, which he did until the end of 1884.

With the advance of the science of organic chemistry, the laboratory, which had been little altered since it was first opened, was not capable of meeting the demands made upon it. Its most obvious drawback was inadequate ventilation,⁵⁷ although a draught chamber was installed in 1871 which improved matters. It is probable that the water and gas supplies were also inadequate as there is no mention, over the years, of any modification of these services to the laboratory. In addition, the laboratory did not have an electricity supply.

No further appointment was made to the professorship of chemistry after Armstrong left. An interesting insight into how the decline of the laboratory came to be viewed nearly thirty years later, was provided by J.W. Gordon, a member of the Royal Institution and a former proprietor of the London Institution, when he wrote, "the Laboratory of the Institution was allowed to pass from under the observation of the Members and to be run as if it were the private Laboratory of the Professor in charge of it. In process of time it suited the convenience of the Professor to transfer himself and his activities to another laboratory whereupon the Laboratory of the London Institution came to an end,"⁵⁸

56. See p.175.

57. See p.168,174.

58. R.I. File on Controversy over Davy-Faraday Laboratory Accounts, 1906 - 1913. Letter from J.W. Gordon to Sir James Crichton-Browne, 12 April, 1913.

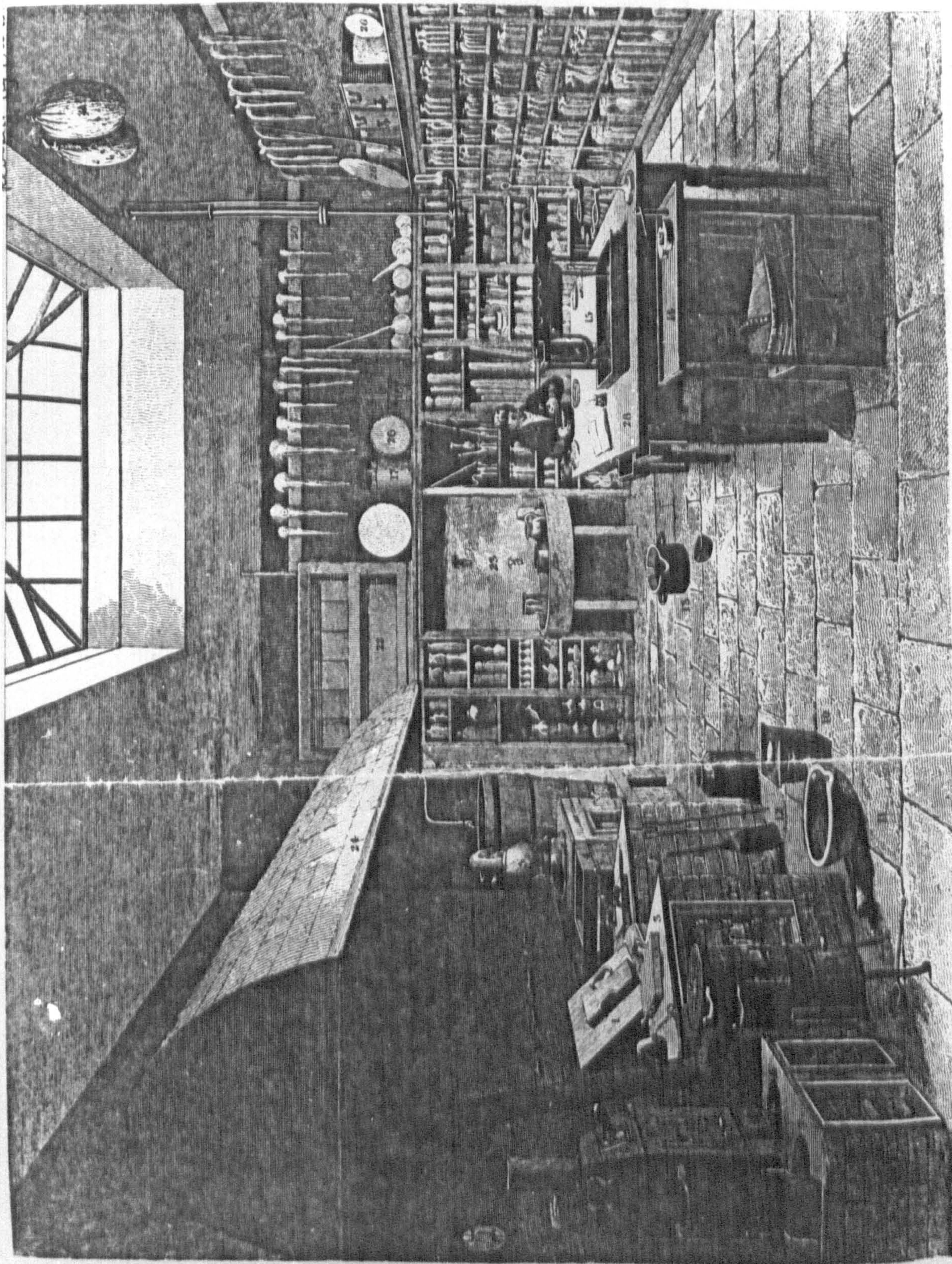


Plate VII. The Laboratory.

Chapter 7.

The Final Years.

On 25 March 1912,¹ the proprietors met to consider the Treasury letter² which contained the proposals of the Royal Commission on University Education in London as they affected the Institution. These proposals included the following: that the freehold property of the Institution, with the exception of certain books and manuscripts³ and the funds of the Institution which were invested in consols, were to be transferred to the governing body of the School of Oriental Languages, or any body that the government might direct, for the use of the School; after the passing of the necessary Act of Parliament, the Treasury was to make a grant of £12,000 which, together with the funds in consols, would be used to discharge the Institution's debts and liabilities, in making provision for members of the staff who would lose their jobs and in paying the existing proprietors £25 per share for extinguishing their proprietary rights. Arrangements were to be made for the administration of the Travers Fund⁴ and the library was to be dispersed.⁵

Existing proprietors who continued to pay the annual subscription of 2 guineas and the life-subscribers would be known as 'continuing members' and would have a reading room, smoking room and lavatory accommodation provided, as well as reasonable access to the reference library, theatre and committee room.

The income from the subscriptions of the continuing members would be used to pay for heating, lighting and cleaning the rooms allocated to them

1. See also p.205.

2. Treasury letter, 1912. Bound with L.I. minutes of General Meetings, also with General Committee Reports, 1913, - 32. Both in Guildhall Library.

3. See p.120.

4. See p.141.

5. See p.120.

and any funds left after these services had been paid for would be used to provide lectures and periodicals. When the income of the continuing members, either from subscriptions or other sources, fell below £170, their rights would cease. The existing circulating library was to be discontinued.

If these terms were accepted, the government would seek the necessary statutory powers from Parliament to carry the proposals into effect. Parliament was also to be asked for a grant of between £20,000 and £25,000 to carry out repairs and alterations to the building and for an annual grant of £4,000 towards the maintenance of the school.

After discussion, the proprietors accepted these terms. At the final annual general meeting in April 1912, those proprietors who wished to become continuing members were invited to send to the board, in writing, any suggestions they might have as to the best use of the rooms that they had been allocated.

Before the end of the year, the London Institution (Transfer) Act⁶ was passed, which dissolved the Institution and transferred its property to the Commissioners of Works for the establishment of a School of Oriental Studies.

Three groups of people were entitled to become 'continuing members', namely: those who, at the commencement of the Act, were proprietors and who informed the Commissioners of their intentions to pay an annual subscription, before 1 January 1913; those who were life-subscribers at the commencement of the Act; and anyone who at any time after the commencement of the Act

6. An Act to provide for the transfer to the Commissioners of Works of certain property of the London Institution for the purposes of a School of Oriental Studies, and for the dissolution of the Institution, and for purposes in connection therewith (13 December 1912) (2 & 3 Geo.5 c13)

was nominated as a continuing member by any person who, if the Act had not been passed, might have nominated him as a life-member of the Institution. They were to have exclusive use of a reading room and smoking room and to have such use of the library, theatre and other parts of the building "as in the opinion of the Commissioners is reasonable and not calculated to interfere with the main purposes for which the buildings . . . are intended to be used."

When the income of the continuing members fell below £170, their rights would cease. Finally, the continuing members were required to appoint a committee to control their affairs and administer their income.

The first meeting after the Act was held on 3 February 1913, when 76 members attended. They elected a general committee of twenty members to exercise general supervision over the Institution's affairs of the Institution and an executive committee of six members to be responsible for ordinary administrative matters.

In July 1913, a sub-committee was formed with the task of considering whether lectures should be arranged for the coming winter season. The sub-committee decided that £50 should be spent on lectures, of which two should be on scientific subjects, two on music and two of a general or popular nature. The Institution could not afford to advertise the lectures in the press but despite this, a total of 1,850 persons attended them, making an encouraging average of 130 at each lecture.

Early in 1914, a circular was sent to members informing them that a telephone had been installed in the building which they could use free of charge and reminding them that, in addition to the facilities available in the reference library, to which they had access, there were some 5,000 books in the circulating library which could be borrowed on application to the assistant secretary. Besides this, daily newspapers, weekly and

monthly periodicals and other literature were available in the members' reading room and chess was provided in the smoking room.

In June 1914, the Office of Works notified the executive committee of the alterations to be carried out on the building and it was decided that, in view of these, it would not be possible to arrange lectures for the coming season. While the building operations were going on, the Office of Works agreed to allow continuing members the temporary use of a basement room as they would be unable to use the rooms allotted to them. Newspapers and periodicals would be available in this room and members using it would be asked to pay a voluntary subscription of one guinea. By early 1915, the Office of Works gave the members possession of the newsroom but informed them that because of building delays caused by the war, the other rooms set aside for the continuing members would not be available for some time. It was therefore decided that the subscription should be one guinea until these rooms could be used.

The members were able to take over the rooms allotted to them in 1917 and were allowed to use the library again. The committee decided to take out a subscription to Mudie's library and also had some of the books from the old circulating library put on shelves in the members' rooms. Lectures were restarted and included those given under the auspices of the Travers Trust, which were of a more general nature than formerly. According to the reports of the general committee, the lectures were popular and reasonably well attended. The only hitch to their delivery occurred in 1925 when the Institution had arranged lectures only to find that it could not have the use of the theatre on certain dates because the School wished to use it.

As has been said, the 1912 Act of Parliament stipulated that the continuing members were forbidden to recruit new members and when their

annual income fell below £170, their rights in the Institution would cease. Inevitably, their numbers declined and the members found their income dwindling as a natural result. In 1912, there had been 217 continuing members and 39 life subscribers and by 1931, the total number of continuing and life members was 59. It therefore became necessary for voluntary subscriptions to keep the income at the required level. In 1919 the general committee noted with satisfaction that the life-members, who did not have to pay an annual subscription, had contributed more to the general fund than in previous years. The Travers Trust also gave assistance : in February 1913, the secretary reported that the Trust had donated £11 towards the lecture expenses in addition to the ten guinea fee for the delivery of the lectures.

In 1931, the School of Oriental Studies was offered a site in Bloomsbury and therefore wished to dispose of the Finsbury Circus building. An extraordinary meeting of the governing body of the School, held on 26 November 1931, appointed a sub-committee to conduct negotiations with the continuing members and also decided that a definite offer of compensation, not exceeding £5,000, should be made to them and the life subscribers on condition that they agreed to give up their rights in the School building. If this proved impossible to arrange, a bill would be introduced into Parliament to determine the members' rights.

The first meeting of the School's sub-committee with the continuing members took place on 11 December 1931. At first, the sub-committee offered £4,000 compensation but the continuing members wanted £8,000. Finally, however, the offer of £5,000 was agreed upon and the agreement was completed on 15 December 1932 when the deed for the £5,000 payment was handed over to the School.

Chapter 8.

Review and Assessment.

In attempting to assess the extent to which the London Institution might be considered 'successful', it is important not to see it against a static background. This means that what, from a proprietors' point of view, might have been acceptable in say, 1820, might have been a source of complaint in 1870, for example.

The initial aims of the Institution, as laid down in the bye-laws of 1806 were the acquisition of a library, the diffusion of useful knowledge and the establishment of a reading room.¹

As soon as the temporary committee² was established to run the affairs of the newly-founded Institution, large sums of money were spent on books, including some rare works.³ Who was going to use these rarities is not clear and whether the library served the purpose originally hoped for is also open to question. After the free spending of the first few years, the amount of money available for the purchase of books decreased sharply⁴ and, as the years passed, complaints were made that some sections of the library lacked recent works.⁵ Furthermore, there is very little information on the numbers using the library and who these users were. One of the few pointers to this was given by Nicholson in his report for 1880,⁶ when he said that schoolboys were using it to complete their lessons but that very few proprietors used it for serious reading. From time to time, there were references to 'numerous persons' using the library but precise numbers were

1. See p. 22.

2. See p. 13, 19.

3. See p. 86.

4. See p. 27 and Appendix IV

5. See p. 106.

6. See p. 107.

not given. Even though the library was intended mainly for the use of proprietors and subscribers, outsiders prepared to take the trouble of tracking down a proprietor could gain admittance with a transferable ticket. This caused the board to reflect, with satisfaction, that the Institution's library had been ". . . found a very suitable substitute. . ." for readers when the British Museum Reading Room was closed.⁷

From the outset, the newsroom was an important and popular feature of the Institution. There was a good supply of daily and evening papers at a time when the cost of newspapers was high and it acted as a meeting place for proprietors and their friends (with transferable tickets). Although after the 1812 committee of enquiry had reported on its investigations, the number of newspapers provided was reduced, the newspaper and pamphlet room section never became a subject of controversy.

The one part of the initial programme that was not fulfilled in the first fourteen years of the Institution's life was the diffusion of useful knowledge by the provision of lectures, despite the managers' efforts to find suitable accommodation for them. After 1820, courses of lectures were given, which included some on science. These were based on the tacit assumption that science, even that which was at or near the frontiers of knowledge could be understood by a layman.

For most of the nineteenth century, education in schools concentrated on English grammar and the classics. Even though the latter years of the eighteenth century and the first part of the nineteenth century saw considerable progress in science with the important work in chemistry of Priestley and Lavoisier, followed by the researches in magnetism and electricity of Davy and Faraday, it did not follow that such subjects would

7. Librarians' Report, 4 January, 1864.

be taught in schools. Scientific instruction was, for the most part, conspicuously lacking and it was not until the latter part of the nineteenth century, with the advocacy of Herbert Spencer (1820-1903) and T.H. Huxley, that much serious consideration was given to the teaching of science in schools.

This lack of science teaching could result in adults being curious about science and its possibilities, not having had their interest damped by unimaginative early teaching. On the other hand, it could also mean that the Institution's audiences did not know the fundamentals of the sciences upon which they heard lectures. When a science was in its early stages, this would probably have been no handicap but, as science progressed, those without such basic knowledge would find it difficult to understand the latest advances.

It was probably this difficulty that eventually led away from lecture courses intended to provide systematic teaching to short courses or single lectures which entertained rather than instructed. The 'entertainment' aspect became more obvious in the 1890s when nearly all the lectures were illustrated by lantern slides or other means. Lecture courses at the Royal Institution show a similar trend, where courses of two or three lectures became the rule rather than the exception in the 1880s and 1890s.

The introduction of lectures was the opportunity for George Birkbeck (1776 - 1841), who was a proprietor of the Institution, to become active in its affairs. He had been a manager from 1812 to 1815 but, beyond putting in a report on the state of the apparatus in 1815 was not particularly active. However, in 1819 he gave, gratuitously, a course of lectures on natural

philosophy. Three years later, he gave a course of seven lectures on the atmosphere and the following year was re-elected a manager. He held office continuously until 1835, when he became a vice-president, a position he held until his death. He did not lecture again until 1830 but from then until 1838, with the exception of 1833, he gave at least one lecture or soiree, on a variety of subjects, in each lecture season. Rather surprisingly, perhaps, his fellow proprietor, John Mason Good (1764 - 1827),⁸ who had lectured at the Surrey Institution,⁹ gave no lectures at the London Institution. On the other hand, after 1820, Good concentrated on his medical practice and so possibly had no time to lecture.

It is not obvious how the type of lecture programme that the Institution followed could confer any benefit on commercial activity. Possibly the proprietors themselves found that the idea of receiving scientific instruction by lectures was somewhat different from the reality with the result that the emphasis moved from instruction to entertainment. This changed idea is illustrated in the difficulties that were found in adapting the subjects of the Travers lectures, which were meant to be on commerce and commercial law, to the interests of a general audience.¹⁰

Most of the Institution's activities in the first twenty years or so must have been seen against the background of a management committee who seemed to find it difficult to reconcile the expenditure of the Institution with its income. Their problems culminated in the appointment of the 1829 committee of enquiry. Among the members of this committee was William Tite (1798 - 1873)¹¹. Shortly after the investigating committee presented its report

8. See Appendix I Original & Elected Proprietors.

9. See p. 7.

10. See p.142.

11. D.N.B., Obit. of Tite, Journal of L.I. July 1873. Vol.III no.21, p.58,59. L.I. Managers' Minutes & Reports.

he was elected secretary, a post he held until 1867, when he became a vice-president, until his death.

As well as being the longest serving secretary that the Institution ever had, he was one of its most forceful personalities and ruled the Institution in his own way. He brought the finances back on to an even keel and for this remarkable feat was presented with a piece of plate in 1833, at a cost of £52-10-0.

Tite had been trained as an architect and was extensively employed in the valuation, purchase and sale of land for railways, as well as designing many railway stations, which included most of the stations in the Caledonian and Scottish Central Railways in the Early English (Nineteenth Century Railway) style and the London and South Western Railway terminus at Nine Elms. His most important work was the Royal Exchange which was opened by Queen Victoria in October 1844.

After a serious illness in 1851 - 2, he gradually ceased active professional work but became involved in public life instead. He was elected M.P. for Bath in 1855 and continued in this capacity until his death. In Parliament he spoke out against the proposed introduction of the Gothic style in the Foreign Office and other public buildings adjoining the Treasury. In 1835 he was elected F.R.S., F.S.A. in 1839 and was knighted in 1869. He was president of the Royal Institute of British Architects from 1861 to 1863 and from 1867 to 1870 as well as holding many other public offices.

In 1859, after the death of John Renton,¹² one of the managers, his

12. John Renton (c1775 - 1859) Exhibited some 40 pictures at the Royal Academy between 1799 and 1840. He was a portrait and landscape painter. His portraits were mostly of clergymen and his landscapes were of Scotland, the Lakes and Lancashire.

portrait of Tite was among the works remaining in his studio. The managers acquired it and it was hung in the board room.¹³ When Tite resigned the secretaryship in 1867, a special meeting of proprietors voted that a marble bust should be executed as a permanent record of his services to the Institution. William Theed¹⁴ was commissioned at a cost of 100 guineas and the bust was exhibited at the Royal Academy in 1869.

Although no longer secretary, Tite remained active as a vice-president. When educational lectures were restarted in 1870 with an examination at the end of each course, he presented the prizes to the successful candidates. The following year he gave a sum of money to purchase prizes.

A practice which, although not contravening the bye-laws, was not particularly good for the Institution's health, was started in 1838. This was to re-elect the board of management in its entirety with the obvious exception of those who had resigned or died, for whom the board nominated replacements. The proprietors seem to have accepted this state of affairs without question, probably because the finances still remained in the black and there were sufficient funds to have a professor of natural philosophy working in the laboratory.

None of the presidents under whom Tite served during his long 'reign' seems to have been particularly active in the Institution's affairs. George Hibbert was president when Tite became secretary and, although he had served

13. By 1902, portrait and frame were in need of renovation at an estimated cost of £5-5-0. The managers decided to offer the portrait to the National Portrait Gallery but the offer was refused as the Trustees did not consider Tite to be of sufficient national importance. No record of subsequent history of portrait.

14. William Theed (1804 - 91). His most important work was the group represented 'Africa' in the N.E. angle of the pedestal of the Albert Memorial in Hyde Park. No record of what ultimately became of the bust. A copy is in the possession of the R.I.B.A. which also possesses a portrait of Tite by J.P. Knight, R.A. There is a Theed bust of Tite in the Guildhall, Bath; presented to the city in 1872.

the Institution well over the years, by 1829 he was in his seventies and probably content to let the energetic young secretary manage the Institution's affairs. His successor, Sir Thomas Baring, who took office in 1835 was, like Hibbert, an original proprietor though not such an active one. In his later years, he suffered from failing sight and resigned in 1847, having become totally blind.

His son, Thomas Baring, M.P. (1800 - 73), then took over the office, which he held until death. He was the longest-serving president of the Institution. Although he was a successful business man, eventually becoming head of the family business and was M.P. for Huntingdon from 1844 until 1873, he seems to have been of a retiring disposition. He was not ambitious ". . . and he never cared to go out of his way for a post which, if it brought honours, must also bring certain cares and public responsibilities."¹⁵ On two occasions he declined the Chancellorship of the Exchequer offered to him by Lord Derby in 1852 and 1858. "Had he been more ambitious he might have played a more important part in history."¹⁶ However, he was one of the commissioners of the Great Exhibition in 1851 and in 1852 presented a large number of official documents connected with the exhibition to the Institution library.

One of the most active managers on the board while Tite was secretary was John Peter Cassiot (1797 - 1877),¹⁷ who became a manager in 1840. He was a member of the firm of Martinez, Cassiot & Co., wine merchants and had considerable interest in science. One of his first duties as a manager was to serve on the special committee which led to the appointment of W.R. Grove. Later, after Grove's resignation he tried, unsuccessfully, to persuade Tyndall

15. The Times, 20 November, 1873.

16. D.N.B.

17. D.N.B.; Dictionary of Scientific Biography; See also p. 162.

to accept the post at the London Institution.

Most of his scientific research was concerned with electrical discharge through gases, the striations which appear at certain pressures in a discharge tube occupying much of his attention. He was a friend of Faraday and performed some of his experiments with Faraday's help.

He served as a manager until 1857 when he became a vice-president and held this post until his death. As well as his interest in the London Institution he was active in other scientific organisations, being chairman of Kew Observatory, which he endowed. He was one of the founders of the Chemical Society and organised the Royal Society Scientific Relief Fund.

Another who was active on the management committee in the 1840s and 1850s was Alfred Smee (1818 - 1877)¹⁸, who became a visitor in 1845, a manager in 1853 and vice-president in 1874. From 1840 until his death he was a consulting surgeon in Finsbury Circus. In the following year, the post of surgeon to the Bank of England was specially created for him. He was also surgeon to the Aldersgate Street Dispensary and to the Central London Ophthalmic Institution. As well as his career as a surgeon he had numerous scientific interests. For example, in 1840 he devised a cell consisting of zinc and silver electrodes in sulphuric acid - the 'Smee battery'. Two years later, he invented a durable writing ink for the Bank of England and in 1860 he constructed an ether inhaler.

His main interest was in the investigation of electrical deposition of metals. In 1840, he published Elements of Electro-metallurgy, which included the art of electro-typing. He also used electrical methods to detect the presence of metal fragments embedded in the body and explained his methods in On the Detection of Needles. . . impacted in the Human Body.

18. D.N.B.; E.M. Odling, A Memoir of A. Smee; See also p.139.

published in 1845. Horticulture was another of his interests and he gave a lecture on this at the Institution.

He delivered several lectures and soirees between 1847 and 1857 and was particularly active in bringing about the series of 'educational lectures' given in the 1850s.

During these years, that is the 1840s and 1850s, many of the managers seem to have been remarkably tenacious both of life and office. This inevitably led to dissatisfaction among some of the proprietors and in 1854, the managers were described as "the dregs of the last thirty years' Boards of Management, and the selected matter added from time to time to keep up the requisite quantity, which has neither given body nor flavour to the mixture."¹⁹

Smee, Cassiot and, particularly, Tite were criticised by the writer of the above words for their methods of running the Institution. Tite had, according to him, managed the funds satisfactorily but with the result that "the healthful control of the Proprietors has been got rid of; that the vitality of the Institution has almost died out; that fully 90 per cent of the Proprietors have ceased to concern themselves about it"²⁰ To retrieve its position, the Institution should provide a circulating library and courses of lectures which were to be paid for out of the fees of those attending.

Another pamphlet which had been circulating among the proprietors was mentioned in the 1853 report. According to this, the circular proposed that the Institution's library should be presented to the Corporation of London, its building and investments sold and the proceeds divided among the proprietors. The managers pointed out that such a course would be illegal

19. Adam Scott The London Institution as it Has Been and As it Ought to be, 1854, p.1. See above p.129 note.

20. Ibid., p.10,11.

and nothing more was heard of it.

It may be that the managers dealt with some criticisms by ignoring them but others could not be disposed of so easily. Matters came to a head in 1865 when a proprietors' committee was formed to investigate the Institution's affairs. This was precipitated by the suggestion that the Institution might be amalgamated with the City of London College, formerly the Metropolitan Evening Classes in Leadenhall Street.²¹ The plan was that additional classrooms should be built at the Institution for the College, that the president, vice-presidents, honorary secretary and two managers of the Institution should be members of the College Council and that a maximum of fifty of the senior students should be able to attend the Institution's lectures and use its library and laboratory.

A special general meeting was called on 28 February 1865, when the proprietors were told of the scheme. To many of them it looked more like a take-over than an amalgamation. Objections were also raised on the grounds that "the College was based on Anglican principles whereas the Institution was exclusively secular".²² Feelings ran high and a pamphlet which was circulated in May 1865 virtually accused Tite and Cassiot of attempting to influence proprietors' votes by unfair means. It also complained of ". . . the unwarrantable and domineering conduct of Mr. Cassiot"²³ as chairman of the meeting.

The proprietors' committee was set up at this meeting and was to consider changes and improvements needed in the Institution's administration and report accordingly, to discourage the amalgamation with the City of London College and to request the managers not to sell any forfeited shares

21. See also p.142.

22. Preliminary report of the Proprietors' Committee.

23. The London Institution, pamphlet, dated 4 May, 1865, p.7.

for the time being, as it was feared that such shares would be sold to persons interested in bringing the suggested merger about.

In accordance with its brief to investigate the administration, the committee asked to see books, accounts, papers, records and personal information and a special general meeting was called on 15 March 1865 to demand these. The managers were at first unwilling to allow such documents to be seen and so there were exchanges between the proprietors' committee and the managers, with the unfortunate Brayley, who had charge of the records, caught in the middle. Finally, on 31 March, the managers held a special meeting at which they acceded to these requests.

The proprietors' committee recommended that a room should be provided where members could meet for conversation and discussion and where refreshments could be served. Instead of concentrating on lectures on science and literature, which were adequately provided by other institutions, the Institution should concentrate on "the diffusion of knowledge of the scientific principles of commerce and finance."²⁴ The lecture programme, the professorship of chemistry and the use of the laboratory should be reviewed - and possibly the money put to better use. Books from the reference library should be put into circulation, essays and papers read and discussed in the library and the list of newspapers and periodicals taken revised. The board of managers should have a greater number of proprietors' representatives, and other organisations might be allowed to use the theatre if some of their members were also members of the Institution.²⁵

This report was presented to an adjourned general meeting on 5 May 1865. Wisely, the managers, having been made aware of the proprietors' feelings,

24. Preliminary Report of Proprietors' Committee.

25. See p. 44.

decided not to push to proposed amalgamation further and nothing more was heard of it.

Most of the recommendations of the proprietors' committee were eventually carried into effect. A conversation room, which had first been requested and rejected in 1858, was provided in 1873 and in 1866 an experiment was tried in supplying refreshments for proprietors by arrangement with an outside caterer. Later, books from the reference library were put into circulation,²⁶ other organisations used the premises,²⁷ and it may be that Wanklyn's dismissal had its origins in the request that the matter of the professorship and laboratory work be reconsidered.²⁸

In April 1866, the managers received a letter from William Hartridge, who had been chairman of the proprietor's committee, suggesting that the Institution should amalgamate with the proposed new corporation of the Middle Schools.²⁹ The main outlines of the plan were that the library, theatre and possibly the pamphlet and newsroom should be retained and all proprietors keeping their shares should have access to these rooms and should not have to pay an annual subscription. Those who relinquished their shares would receive £25 per share. The whole of the Institution's property should be transferred to the school corporation with full power to adapt the existing buildings and erect more if necessary. The bye-laws would provide for the appointment of library, general purpose and lecture committees as far as was compatible with the school's arrangements. The plan was put before the proprietors at the 1866 annual general meeting but was defeated.

26. See p.116.

27. See p.44-47.

28. See p.171.

29. Probably Cowper St. Middle Class School, which was close to Finsbury Circus. J.P. Cassiot endowed this school, and bequeathed some of his apparatus to it.

After the rejection of the two amalgamation attempts, the Institution had a period of prosperity. Lectures were well attended, the circulating library was popular, shares sold readily and annual subscribers came in large numbers. The lecture theatre, if not required by the Institution itself was used by other organisations, which provided a useful source of income. Admittedly scientific activity was declining, soon to disappear altogether but it seems unlikely that many proprietors would worry about that. After all, it absorbed resources rather than bringing in money and with the enormous popularity of the lending library, it must have seemed that, at last, the Institution was set on the road to success and prosperity after all its years of uncertainty. It is not surprising, therefore, that no schemes for radical alteration of the building or for merging the Institution with other organisations appear during this period. The only building alterations done were to increase the accommodation available.

All this activity developed under the presidency of Warren de la Rue (1815 - 1889)³⁰ who succeeded Thomas Baring in 1874 and remained in office until 1885. He had been elected a manager in 1854 and a vice-president ten years later. He was the eldest son of Thomas de la Rue, a printer. After leaving school, he entered his father's printing shop where first developed his interest in technology and became one of the first printers to use electro-typing. With a friend, Edwin Hill, he invented the first envelope making machine, which was exhibited at the 1851 Exhibition.

His scientific interests included physics, photography and astronomy and he was one of the first to use photography for astronomical work. In 1874 he took an active part in the preparations for photographic observations of the transit of Venus. He was active in scientific associations: he was elected F.R.S. in 1850, he was one of the original members of the Chemical

30. D.N.B.; Dictionary of Scientific Biography.

Society, he was a Fellow of the Royal Astronomical Society, being president from 1864 to 1866 and he was also member of the Royal Institution and the Royal Microscopical Society.

Also a member of the management committee at this time was William Huggins (1824 - 1910)³¹, who became a visitor in 1862 and a manager from 1872 until 1884. He was a silk mercer and linen draper in the City of London until 1854 when he set up an observatory at his home in Tulse Hill, which was equipped with instruments partly purchased by himself and partly loaned by the Royal Society. It was here that he carried out all his astronomical researches. His pioneer work in astrophysics brought him the Rumford and Copley medals of the Royal Society and the gold medal of the Royal Astronomical Society.

He worked on spectroscopic investigations of stars, comets and novae in the Corona Borealis constellation, made studies of nebulae, discovered their gaseous nature, perceived the possibility of applying the Doppler effect to determine the motions of stars in the line sight and consulted Clerk Maxwell on this theory. Between 1864 and 1881, he gave two soirées and a lecture at the Institution on spectroscopy and the spectra of stars.

Warren de la Rue was succeeded as president by Henry Hucks Gibbs (1819 - 1907)³², first Lord Aldenham, who pursued a successful commercial career as well as having interests in philology and lexicography. He took great interest in the English dictionary which had been projected by the Philological Society in 1854 and when the project was taken up by the Oxford University Press in 1880, with Sir James Murray as editor, Aldenham helped to settle the final form of the New English Dictionary and read and annotated

31. D.N.B.; Dictionary of Scientific Biography.

32. D.N.B.; Cockayne's Peerage Vol. I p.103,104. The Times 14 Sept. 1907.

proofs until shortly before his death.

When Aldenham resigned from the presidency in 1894, the affairs of the Institution were already less prosperous, and yet it is during the period 1894 to 1906 that the Institution had its most distinguished president in the person of Sir John Lubbock (1834 - 1913)³³, first Lord Avebury, who had been elected a manager in 1860 and a vice-president in 1877. He had devoted himself to a career in banking, eventually becoming head of the banking firm of Robarts, Lubbock & Co. His activities in the banking world included helping to inaugurate the system of clearing-house returns. He served as honorary secretary of the London Bankers in 1863; from 1879 to 1883 he was the first president of the Institute of Bankers; he was the chairman of the committee of London clearing bankers from 1898 to 1913 and president of the Central Association of Bankers.

He was also active in public life, being elected Liberal M.P. for Maidstone in 1870 and Liberal M.P. for London University in 1880, a seat he held until 1900 when he was raised to the peerage. He was made a Privy Councillor in 1890, served as president of London Chamber of Commerce from 1888 to 1893 and was an original member and subsequently chairman of the London County Council from 1890 to 1892. From 1872 to 1880 he was a member of the Senate and Vice-Chancellor of London University, chairman of the Society for the Extension of University Teaching from 1894 to 1902 and principal of the Working Men's College in Great Ormond Street from 1883 to 1898. He was also a trustee of the British Museum and, in 1908, Rector of St. Andrews University.

His scientific interest lay in the study of the habits, life history and ancestry of members of both plant and animal kingdoms. He and his

33. D.N.B.; Dictionary of Scientific Biography.

assistants made important discoveries about the habits and instincts of social and other insects. Anthropological interests led him to travel quite widely in search of evidence of man's antiquity. He was elected F.R.S. in 1858 and was a member of the Council of the Royal Society and, in addition, he was president of many scientific societies, including the Entomological, Ethnological, Linnaean and Ray Societies, the International Association of Zoology, the International Association for Prehistoric Archaeology and the International Library Association.

However, by the early 1900s, massive expenditure had been incurred on the building and there was a general air of decline so once again, merger and rebuilding schemes emerge.

The first indication that such plans were afoot appeared at a managers' meeting on 10 November 1902, when a letter was read from F.W. Manson, one of the auditors, to Lord Avebury. It mentioned measures to increase the usefulness of the Institution, although in an unspecified manner. The managers hoped that if Lord Avebury had any ideas on the possible future of the Institution, he would let them know. However, his suggestion that the library should be placed at the disposal of the City of London College was rejected as not being in the interests of the Institution.

Manson wrote again in March 1903, this time suggesting some form of cooperation between the Institution and London University. He had discussed the matter with Sir Arthur Rucker,³⁴ who supported the scheme. A sub-committee was appointed to consider the matter.

Two months later, the visitors' committee wrote to the managers expressing their willingness to discuss the future of the Institution.

³⁴. Sir Arthur Rucker, F.R.S. (1848-1915) was Principal of London University 1901 - 1908, had previously been professor of physics at the Royal College of Science, South Kensington from 1886 to 1901. His most important contribution to science was the Magnetic Survey of the British Isles for the epochs 1886 and 1891. (Nature Vol.96, 1915, p.289).

The managers put forward two possibilities: the first was to investigate the desirability of establishing a laboratory for original research "with especial reference to manufactures and other operations carried on in the Metropolis. .";³⁵ the second was to find out whether some arrangement could be made with the City of London College, the education committee of the London Chamber of Commerce and the City and Guilds of London Technical Institute to promote higher education in London.

On 13 July 1904, a scheme was presented by R.S. Fraser, a proprietor, (not to be confused with R.W. Frazer, the librarian), which proposed to make the Institution a centre for commercial education. A sub-committee was set up to consider the plan, which required the cooperation of the London Chamber of Commerce to bear the cost of classes, while the Institution provided the necessary accommodation. After consideration, the sub-committee rejected the idea.

Later in 1904, it was suggested that the Institution might amalgamate with the Society of Arts³⁶ which was also having difficulty over its premises. Both organisations appointed a sub-committee to consider the matter and the joint report was presented in February 1905. It emphasised that it must be a union of the two organisations for their mutual benefit, not the absorption of one by the other. In the short term, the aims of the new body would necessarily be the continuance of current work although eventually a large teaching and research institute was envisaged with facilities for industrial research, and a scientific library, produced by the amalgamation of the two libraries, "which could hardly have a rival in London."³⁷

³⁵. Managers' Minutes, 11 May 1904.

³⁶. See also pp.202,203. The lease of its building expired in 1904, and until 1922 when it was able to purchase the freehold, the Society held its house on a tenure that could be terminated at two years' notice (Hudson and Luckhurst, The Royal Society of Arts 1754 - 1854, pp. 366 - 7.)

³⁷. Managers' Minutes, 7 February, 1905.

The new organisation would need a new building on a less easterly site than Finsbury Circus, probably between Charing Cross and Chancery Lane, at a cost of about £100,000. If a large building were erected, other organisations might be accommodated in it. In the event of the merger being put into operation, both Charters would have to be surrendered and a new one obtained.

A special meeting of proprietors, held on 12 April 1905 to consider the scheme, was far from enthusiastic and the meeting closed without a vote being taken. The managers decided that this should not be allowed to prejudice other plans. They therefore recommended that negotiations should be started with the governing body of Gresham College, with a view to moving the lectures to the Institution, but, like the previous attempt so many years earlier, this came to nothing.

Early in 1906, the managers re-opened discussions with the Society of Arts. The Society was prepared to meet the Institution only if the location of the new building was one of the matters for discussion, as the Institution's determination to stay in the City was causing difficulties.

Other ideas suggested included the use of the Institution as a City centre for London University and cooperation with the University on a scheme of commercial education.

Plans for rebuilding the Institution in 1907 came to nothing as the managers were unable to obtain tenders.

A letter appeared in The Times for 19 July 1907, from A.J. Windus, a proprietor, (~~Islington N.~~) an auditor, about a question asked in the House of Commons by Mr. Waterlow on 27 June 1907.³⁸ It referred to the difficulties that the Institution was having in carrying out the objects of its Charter

38. Hansard. The Parliamentary Debates, 4th Series Vol.177 p.123

and suggested the desirability of a parliamentary enquiry into the position of the Institution. The prime minister had advised cooperation with the Chamber of commerce and the Gresham Trust. The letter mentioned the proposed merger with the Society of Arts, which had still not reached a conclusion and revealed that several proprietors had approached the Royal Institution with a view to amalgamation. The writer felt that strong moves were being made to divert the resources of the Institution from the original purpose and to use them for commercial education. He hoped that proprietors who wished to "ensure the proper application of their valuable property, either on the present site or elsewhere ", would contact him.

This drew a reply from R.S. Fraser,³⁹ who wished to receive the names of proprietors wanting to see the continuation of the Institution on its present site and who blamed the managers' lack of interest for the Institution's predicament.

After 1908, no managers' minutes are extant and so, although plans for reorganisation may have been put forward, only those which matured sufficiently to appear in annual reports or newspaper articles can be reported.

The merger with the Society of Arts was still not settled one way or the other. A postal ballot was held in January 1909, which gave 526 for amalgamation and 84 against - a majority of 442. The managers took this as "an informal expression of opinion".⁴⁰ A special general meeting was held on 10 February and a ballot was demanded which resulted in 322 votes for and 218 against. The board decided to defer action on such a small majority as it had been informed of the formation of a special City Corporation

39. The Times, 5 August, 1907.

40. The Times, 5 February, 1909.

committee to confer with the Gresham committee and several Corporation committees.

At the 1909 annual meeting, the board informed the proprietors of the setting up of the Royal Commission on University Education in London. This was to include in its investigations the foundation of a school of oriental studies, which had already been the subject of considerable discussion. This had started on 4 December 1906, when a memorial, pointing out the importance of setting up in London an institution to study oriental languages, was presented to Sir Henry Campbell-Bannerman, the First Lord of the Treasury. The deputation which presented the memorial included representatives from the London Chamber of Commerce, the Royal Asiatic Society, the Japan Society, the China Association, the African Society, the Church Missionary Society, and the British and Foreign Bible Society, as well as other organisations having interests in the East.

As a result, on 20 April 1907, a Treasury committee, with Lord Reay⁴¹ as chairman, was formed to consider the foundation of a school of oriental studies in London. It reported in December 1908, strongly recommending the setting up of such a school, although it did not think it desirable to erect a new building to accommodate it.⁴¹ The next step came early in 1910 when the Secretary of State for India formed a committee, headed by Lord Cromer,⁴² to prepare a detailed scheme for a school on the lines recommended by Lord Reay's committee.

Early in 1909, the London Institution's managers handed to the Royal Commission on University Education in London, evidence and information on the history and work of the Institution and gave details of the proposed

40. The Times, 5 February, 1909.

41. Donald James Mackay, 11th Baron Reay (1839 - 1921)

41. See: Report of the Committee appointed by the Lords Commissioners of HM Treasury to Consider the Organisation of Oriental Studies in London.

23 December 1908.

mergers and schemes for alterations.⁴³ In February 1910, Lord Aldenham,⁴⁴ the president, and T.M. Wood, the honorary secretary, gave evidence to the Commission, when it was suggested by Lord Haldane, the chairman, that Lord Cromer should be put into touch with Aldenham.

On 17 March 1911, The Times reported that the Institution's managers had decided to receive a deputation headed by Lord Cromer. Lord Cromer's committee considered that the London Institution building would be most suitable for the new school of oriental studies, provided that agreement could be reached with the proprietors.⁴⁵ The board was more cautious in its statement to the proprietors, pointing out that Lord Haldane, the chairman of the Royal Commission, hoped to have "definite proposals for the future of the Institution", which could be presented to the proprietors before long.

The proprietors held a special general meeting on 25 March 1912, when the letter from the Treasury,⁴⁶ containing the proposals of the Royal Commission as they affected the Institution, was read. These meant the virtual end of the Institution, with its building taken over for the intended School of Oriental Languages and its funds used to pay off its debts and liabilities. Proprietary rights were to be ended, with a payment of £25 per share and the library was to be dispersed.

Proprietors who wished to pay two guineas per year could remain as 'continuing members', as could life members. If the proprietors accepted the terms of the letter, funds would be made available to carry out the repairs and alterations to the building.

42. Sir Evelyn Baring, 1st Earl of Cromer (1846 - 1936).

43. See: Appendix to First Report of the Commissioners on University Education in London. p.118 - 9. Also Ibid Appendix 3 p.230 - 233.

44. Alban George Henry Gibbs, 2nd Baron Aldenham (1846 - 1936)

45. See: East India (Oriental Studies Committee) Interim Report of the Oriental Studies Committee appointed by H.M. Secretary of State for India. 1911

46. See also p.140

After discussion, the proprietors accepted these terms and so, in their final report, the Commissioners were able to announce that the School of Oriental Languages would be set up in the Institution's building, which had been transferred to His Majesty's Commissioners of Works. They expressed the hope that "the merchants of the City of London, interested in our Eastern and African trade will contribute liberally towards the maintenance of a school which should serve their interests as much as if not more than those of the public services."⁴⁷

The question of success or failure of such an Institution is not easy to decide over such a long period of time when ideas and attitudes were changing radically.

As has already been said, in its early years the Institution failed to provide lectures but did have an extensive library and a very popular newsroom. Once the Institution had its purpose-built premises in Finsbury Circus, lectures were given with the intention of showing how science and commerce were linked and also to teach basic principles of science. From reports available these were generally successful and well attended. Nevertheless, they were sometimes in jeopardy as the managers cast anxious eyes at the cost of the lectures compared with the money obtained from admission charges.

However, after William Tite⁴⁸ became secretary, the financial position was more stable, to the extent that the lectures were able to continue and W.R. Grove⁴⁹ was appointed to the post of professor of natural philosophy. It may be that neither managers nor proprietors were entirely sure what Grove might be expected to do. On the one hand, research activity was

47. Final Report of Commissioners. p.62 para.142.

48. See p. 188-190.

49. See p.160.

envisaged but on the other, laboratory classes to teach proprietors practical science seems also to have been hoped for. No reasons were given for the failure to appoint an immediate successor to Grove and it could be that the research versus teaching problem was being argued out. The appointment of Malone⁵⁰ seems to suggest that the desire to have laboratory teaching won. This, however, does not explain Malone's sudden dismissal and the subsequent engagement of Wanklyn⁵¹ who did research but did not teach and then was equally abruptly dismissed. Perhaps there would have been a different story to tell if Tyndall⁵² had been appointed to succeed Grove as Cassiot had hoped.

Meanwhile, the laboratory was becoming increasingly out of date and unable to accommodate advancing science. In any case, it is probable that few proprietors really understood the work that was being carried out there and regarded it as taking funds that could be better used in obtaining more books for the library or popular lecturers in the theatre.

The laboratory committee, which reported on the requirements for the professorship of chemistry in 1870, was quite correct to point ^{to the} new public awareness of education and the need for scientific instruction but apparently failed to realise that such instruction was becoming increasingly available at such places as the Birkbeck Institution, or through the Department of Science and Art.

There appears no obvious reason why the number of subscribers suddenly decreased during the last years of the century. Perhaps the annual subscriptions had been raised just too much. There were no public libraries

50. See p.164.

51. See p.167.

52. See p.163.

in the City until 1895⁵³ but it is unlikely that the people who used the Institution's library would wish to use a free library. The most important factor was probably that people continued to move away from the centre of London to live out in the suburbs, from where they might have a lengthy journey to get to the Institution. Also, those interested in science and technology would be most likely to join the specialist and professional associations which were becoming increasingly numerous.

The massive expense on the building that finally brought about the Institution's downfall was caused by repairs necessitated by changes and movements in the sub-soil. Unfortunately this was something which could not reasonably have been foreseen and therefore not guarded against.

Had the Institution not been turned into the School of Oriental Studies, radical changes would have been essential. Its function as a lending library would have gradually become less important as the public libraries increased in number and became acceptable to the middle classes. The specialist societies already mentioned would have catered for those with scientific and engineering interests with the result that the Institution would have probably have had to concentrate on the social side of its function and become a sort of club, as was suggested in 1906 by Frederick Hovenden, a proprietor and honorary secretary of the Institution from 1898 to 1906⁵⁴. Alternatively, it might have amalgamated with another organisation or modified or reconstructed its building so that parts could have housed other societies or have been let as shop or office accommodation.

53. The Bishopsgate Institute (opened 1895), the St. Bride Institute (opened 1895) and the Cripplegate Institute (opened 1896) were founded as a result of the Parochial Charities Act of 1883.

54. A Plan addressed to the proprietors, 4 April, 1906 - in the Bishopsgate Institute.

By comparison with the Royal Institution, the London Institution was not able to attract large numbers of well-known figures. This may have been to some extent due to the hereditary proprietorships making it difficult for an 'outsider' to get in. From time to time, however, men of distinction were numbered amongst the managers and several of these men have been mentioned in this account.

It would be wrong to regard them as a representative sample: they are the people on whom information is available. It is difficult too, to determine their influence because, although they were managers, it is not possible to assess the internal influences they may have brought to bear on their colleagues. The formal resolutions recorded in the Minute Books are obviously an inadequate measure of the discussions that may have taken place - especially outside the committee room. The appearance of names on a list of lecturers is an indication of interest in the Institution; but an absence may not show lack of interest but reticence, modesty or self-recognition of the limitation of a person's knowledge.

Certainly the people mentioned exercised some influences but they were different in their form. Sir Francis Baring, financier and first president of the Institution, seems to have acted as the focus for those who formed the new Institution but then was president for a comparatively short time as he died in 1810. In some ways, his role rather resembled that of Benjamin Thompson, Count Rumford (1753 - 1814), who acted in a similar capacity in the foundation of the Royal Institution but was then connected with it, for a very short period.⁵⁵

Others influenced the Institution in other ways. For example, Tite was secretary for 48 years, Avebury brought his eminence in the worlds of

55. See: Berman, Social Change and Scientific Organisation. p.88 - 119

commerce, public life and science, while Smee was active in promoting educational lectures.

Some of those mentioned do, however, have some characteristics in common. Gassiot, de la Rue, Huggins and Avebury not only had careers in business or commerce but also made their mark in the sciences in which they were interested. Other managers who were similarly successful were, for example, Charles Tilstone Beke, businessman and explorer, Alfred Tylor (1824-74), business man and geologist and John George Appold (1800-65), fur skin dyer and inventor. It may be that these people realised the 'ideal' of the Institution in successfully combining commerce and scientific interests. Whether their scientific interests assisted their commercial activities is difficult to determine in some cases. Gassiot, for example, seems to have pursued science quite separate from his business interests, as did William Huggins who did most of his scientific work after he retired from business. On the other hand, Warren de la Rue's interest in electrochemistry was connected with his activities in the family printing firm and Beke's explorations stemmed from his travels in connection with his business.

According to Parsons⁵⁶, any institution may be considered as a social unit possessing a set of activities, well-defined functions and a concrete organisation. At the start, historical circumstances and traditions determine the form and role of the institution. If the institution continues in existence for any length of time expectations, modes of behaviour, and values peculiar to the institution develop which are strongly reinforced if the institution has a measure of autonomy which includes self-perpetuation. As social conditions change dramatically, the organisation will disintegrate. It may be, however, that its activities and functions are taken over by specially designed or modified units which bear a logical relationship to the defunct institution.

56. Talcott Parsons, Essays in Sociological Theory, 2nd edn. 1958, p.337-8.

These various stages can be seen to a large extent in the life of the London Institution. The initial aims were to have a library, a periodical and newspaper room, and to give lectures.⁵⁷ Despite these, the Institution lacked, particularly in its early years, a personality strong enough to give it a well-defined direction and to achieve these aims. As the years went by and early hopes were not fulfilled, various approaches were made to other organisations with a view to amalgamation.⁵⁸ Unfortunately, these were linked with a sort of institutional 'hardening of the arteries' on the part of the management committee.⁵⁹ Non-managerial proprietors felt that they were not sufficiently consulted, raised objections and so the plans came to nothing.

The lending library and various laboratory classes were attempts to adjust to changing needs but, in the end, they were unable to compete with the new public lending libraries,⁶⁰ and lectures at new educational institutions.⁶¹ The changes that were made in the running of the Institution were relatively minor and it seems that the managers were either unable or unwilling to make the drastic changes which might have saved the Institution and enabled it to survive in a world vastly different from that of the early nineteenth century. The very meaning of the term 'scientific institution' had changed with the increasing professionalisation of science and the foundation of specialist associations.⁶² Defeat was finally admitted with the advent of the Royal Commission.⁶³ Some of the functions of the Institution were carried on by the continuing members, a steadily dwindling group, until the building was finally closed in 1933.

Both the Royal Institution and the Royal Society of Arts⁶⁵ made considerable changes in their organisations when it became clear that such changes were essential for survival. The former institution abandoned hereditary proprietorships early in its career in favour of subscribing membership. A further great change had come about by the end of the century with the gifts of property

57. See p.22.

58. See p.194 and 200-203.

59. See p.190-193.

60. See p.207, 208.

61. Ibid.

62. See p.208.

63. See p.204-206.

64. See ch.7, p.180-184.

65. See p. 2, 201.

66. See T. Martin, The Royal Institution, p.48.

and money of Dr. Ludwig Mond. These enabled the Institution to found the Davy Faraday Research Laboratory and become an endowed research organisation.

The Royal Society of Arts, which always had subscribing members only, in 1845, 90 years after its foundation, made drastic changes in its organisation. It had been founded for "the encouragement of Arts, Manufactures and Commerce" and this it did by distributing premiums and prizes. Gradually it changed from a premium-giving to a paper-reading society.⁶⁷ It also emphasised the use of exhibitions as a means of disseminating information, the 1851 Exhibition being its most famous enterprise. In the years immediately following the Great Exhibition, the Society started a system of examinations in a wide variety of subjects, including English, languages, science, mathematics and commerce.⁶⁸ These early examinations were successful but with the growth of State educational provision, the numbers taking them declined. In the 1880's, a series of examinations in commercial subjects was started which were successful because they were not offered elsewhere. The Royal Society of Arts still has considerable interest in furthering industrial and commercial education and its commercial examinations flourish, a tribute to the Society's ability to adapt itself to changing demands.

Had the London Institution followed the Royal Institution in abandoning hereditary proprietorships, its career might have been different. Although the introduction of an annual payment caused some proprietors to leave when the 1821 Act⁶⁹ was passed, and other shares lapsed through non-payment, a share was, perhaps, something that one could possess without noticing, so to speak. Whereas in the Royal Institution and Royal Society of Arts, a prospective member had positively to wish to join, the acquisition of an inherited share required no such definite attitude of mind. It could also explain the apparent lack of direction in the Institution's affairs. Anyone inheriting a share might have quite different views on what he expected of the Institution than the person from whom he received it. To this it might be objected that

67. For a history of the RSA, see D. Hudson and K. W. Luckhurst, The Royal Society of Arts, 1754-1954.

68. Ibid. Ch.15, 'The Society's Examinations.'

69. See p.32, 33.

shares were sold to 'outsiders' over the years, but these were few in number compared to those bequeathed. It is possible to see family names appearing in the earliest list of proprietors and carrying through to the last years of the Institution.

Perhaps Sir Joseph Banks saw more clearly than he knew when he wrote: "I confess . . . I do not at present foresee the period at which the utility of your new institution is likely to commence. The Royal Society was set on foot (?) by a number of persons well versed in these matters which its Constitution was intended to promote. The Royal Institution was at first wholly under the direction of persons entirely addicted to science . . . All this I can understand but how the very worthy and most respectable men you at present look up to as managers of your institution will be able to guide it into the paths of Science and Literature, is not to be quite so evident as I sincerely wish it to be."⁷⁰

70. Sir Joseph Banks to Sir Francis Baring, 14th October 1805. At the British Museum (Natural History). See also p.19 .

APPENDIX I

Original and Elected Proprietors of the London Institution

The following names come from the list of original proprietors of 1806, printed by Phillips and Fardon of George Yard, while the names of the elected proprietors have been taken from the minutes of the temporary committee of managers, up to January 1807.

Information on these proprietors has been taken from the sources listed below. (Full citation is given in the Bibliography)

W.M. Acres, The Bank of England from Within; Annual Biography and Obituary;
A.B. Beaven, The Aldermen of the City of London; F. Boase, Modern English Biography; A.P. Burke (ed), Landed Gentry of Great Britain; G.E. Cockayne, Complete Peerage; B. Critchett, Post Office Annual Directory for London, 1808; Dictionary of National Biography; East India Register, 1805; East India Stock Ledgers, 1796 - 1807; Gentleman's Magazine; Gerritt P. Judd, Members of Parliament, 1734 - 1832; Law List, 1805; London Directory, 1805; William Munk, Roll of the Royal College of Physicians; Horace Woodward, The History of the Geological Society of London.

Appendix I

Original Proprietors of the London Institution.

1) Those who signed to become proprietors in 1805.

ACKLAND, GIDEON.

Sugar-broker of 25, St. Martin's Lane Cannon St.

ADDINGTON, JOHN.

Surgeon of Spital Square.

ADDISON, JOHN.

Brewer of Highgate.

AGNEW, WILLIAM.

Of Highbury. Listed as E.I.C. shareholder.

AIKIN, ARTHUR. (1773 - 1854)

Chemist and scientific writer. Trained for the Unitarian ministry. Priestley was a friend of his father and so he made a study of chemistry, mineralogy and botany with Priestley. In 1797 he published "Observations in Mineralogy and other branches of Natural History" and two years later, gave a series of lectures in London on chemistry and chemical manufacture. In 1807 he took a leading part in the formation of the Geological Society and contributed several papers to its Transactions. He was secretary of the Geological Society from 1811 until 1817, in which year he became secretary of the Society of Arts, a post he held for 23 years. He was elected F.L.S. in 1818 and became the first treasurer of the Chemical Society, founded 1841.

ALDEBERT, JOHN.

Of Stamford Hill. No information.

ALERS, WILLIAM.

Member of the firm of Robert Hankey, Stephen Hall, Augustus Robert Hankey and William Alers, Bankers of 7, Fenchurch Street.

ALLAN, GRANT

Merchant of Winchester Street.

ALLEN, ROBIN

Member of the firm of Lackington, Allen & Co., who ran the bookshop

Original Proprietors

'The Temple of the Muses' in Finsbury Square.

ALLEN, WILLIAM. (1770 - 1843)

Scientist and philanthropist. F.L.S., F.R.S. From 1802 to 1826 he was a lecturer at Guy's Hospital and also lectured at the Royal Institution. He was a friend of Astley Cooper, Robert Owen and Wilberforce. He became interested in the philanthropic movements of the time, he agitated for the abolition of slavery and was interested in education. Member of Askesian Society and Mineralogical Society and was active in foundation of the Geological Society in 1807.

AMOS, ANDREW. (1791 - 1860)

A lawyer, born in India, the son of James Amos, Russia merchant of Devonshire Square. Between 1826 and 1834 he became auditor of Trinity College, Cambridge, Recorder of Oxford, Nottingham and Banbury, a fellow of London University (University College) and a criminal law commissioner. He was the first professor of law at University College. From 1837 until 1843 he was in India as a member of the governor-general's council and drafted the report which led to the gradual extinction of slavery.

AMOS, JAMES.

Father of Andrew Amos. Member of firm of James Amos & Co., Russia merchants of Devonshire Square. Agent for E.I.C.

AMOS, JAMES, jun.

Son of preceding. Secretary to City Dispensary. Author of "A letter to the Lord Mayor on the Subject of General Relief to the Diseased Poor of London", 1809.

ANDERDON, JOHN PROCTOR.

Merchant.

ANDREWS, J.G.

Address: "At Sir William Blizard's". Probably John Goldwyer Andrews, a surgeon.

ANDREWS, M.

Of 61, Coleman Street. No information.

ANDREWS, THOMAS, F.A.S.

Lawyer, Chancery Lane.

ANDREWS, THOMAS.

Talc-factor of Basinghall St.

Original ProprietorsANDREWS, WILLIAM.

Talc-factor.

ANGERSTEIN, JOHN. (c1773 - 1858)

Son of J.J. Angerstein. M.P. for Greenwich, 1835 - 37. Died at Blackheath in 1858, aged 85.

ANGERSTEIN, JOHN JULIUS. (1735 - 1823)

Merchant, philanthropist, amateur of fine art. Of Russian extraction, he came to England at the age of 15 and was a Lloyd's underwriter at 21. He soon became quite an important figure in the commercial world. By his exertion and influence the modern 'Lloyd's' was established. Represented E.I. City shipping interest in Parliament. He obtained from Parliament an act which prohibited the owner of a vessel from changing its name, thus preventing the owners of unseaworthy vessels from disguising them under a new name. He retired from business in 1811. In addition to his business activities, he was active in re-establishing the Veterinary College, the funds of which had sunk low. Also, aided by Sir Thomas Lawrence and Benjamin West, he acquired a collection of pictures which formed the nucleus of the National Gallery - they were bought by the state in 1824. He was also a proprietor of the Royal Institution.

ANSLEY, JOHN.

Merchant. Member of firm of Ansley, Lambert & Co. of Bread St. He was Alderman for Bread St. Ward, 1800 to 1835 and for Bridge Ward Without from February 1835 to November 1835.

ARCH, ARTHUR. (d. 1839)

A partner, with his brother John, in John and Arthur Arch, booksellers and stationers, Cornhill. They published many books and were also responsible, to a large extent, for obtaining books for the L.I. library. Also a founder member of the Askesian Society.

ARMIGER, THOMAS J.

Surgeon of Finsbury.

ARTHUR, JAMES

Member of firm of Arthur and Varnham, brokers, of Copthall Court.

ASTON, THOMAS.

Insurance broker of Billiter Lane.

Original ProprietorsATCHESON, NATHANIEL, F.A.S., M.P.

Interested in domestic and foreign trade, in 1808 he published a book on trade with the British West Indies. He was secretary of the Society of Shipowners of Great Britain. He was also a proprietor of the Royal Institution.

ATKINS, ABRAHAM.

Merchant; member of firm of J. & A. Atkins of Wallbrook.

ATKINS, JOHN, M.P. (d. 1838)

Merchant, of Wallbrook.

ATKINS, JOHN, jun.

Merchant, of Wallbrook.

ATKINSON, THOMAS.

Merchant, of Thomas Atkinson and Edmund Mount, 3, Broad Street Buildings.

AUBERT, ALEXANDER. (1730 - 1805) (Died before Charter was granted)

After a mercantile career in Geneva, Leghorn and Genoa, he returned to London in 1751 and was taken into partnership by his father. In 1753, he became a director and, some years later, governor of the London Assurance Co. He was an amateur astronomer and built his own observatory at Loampit Hill, near Deptford. He was elected F.R.S. in 1772 and F.A.S. in 1784; in addition, he received a diploma of admission to St. Petersburg Academy of Sciences in 1793. He was also a proprietor of the Royal Institution.

AUBERT, N.B. jun.

A merchant, Lloyd's and Tom's Coffee Houses.

BABINGTON, WILLIAM, M.D. (1756 - 1833)

A physician and mineralogist. Lectured on chemistry at Guy's Hospital for many years. F.R.S. An early member of the Askesian Society and a founder member of the Geological Society.

BACON, HUNTLEY.

Of Bishopsgate Street. No information.

Original ProprietorsBAILY, HENRY.

Of Campion Lane. No information.

BAILY, FRANCIS. (1774 - 1844)

From 1795 to 1798 he travelled in N. America and became a stockbroker in 1799, amassing a considerable fortune. The date of his interest in astronomy is not known but his first paper on the subject appeared in Phil Trans, dated 14 march 1811. He was a founder member of the Astronomical Society and in 1834 put the Society in possession of rooms at Somerset House and, on the death of George IV, raised it to an equal footing with the Royal Society on the visiting board of the Royal Observatory. He was president of the Astronomical Society 4 times. In 1830 he aided the formation of the Geological Society. A friend of Airy and De Morgan. F.R.S., F.L.S., F.G.S.

BAKER, RICHARD.

Of St. Paul's Church Yard. No information.

BAKER, JAMES.

Of Warnford Court. No information.

BALL, JOSEPH.

Iron founder of Stoney St.

BANBURY, WILLIAM.

Silk-broker of Finsbury Place.

BARCLAY, Sir ROBERT, Bart.

Partner in firm of Gillies and Barclay, cornfactors, of Throgmorton St. A director of the Royal Life Assurance Office, Blackfriars.

BARING, ALEXANDER. (1774 - 1848) First Baron Ashburton.

Second son of Sir Francis Baring. Became head of firm of Baring Bros. on his father's death in 1810. M.P. for Taunton (1806 - 26), Callington (1826 - 31), Thetford (1831 - 2), N.Essex (1833 - 35). One of the trustees of the B.M. and National Gallery.

BARING, Sir FRANCIS, Bart. (1740 - 1810)

London merchant - founded the financial house of Baring Bros. & Co. In 1779 became a director of E.I.C. and was chairman, 1792 - 3. He

Original ProprietorsBARING, Sir Francis (cont.)

received his baroncy as a result of this. A proprietor of the Royal Institution. He led the group which founded the Institution and he was its first president.

BARING, HENRY.

Presumably connected with firm of Baring Bros.

BARING, THOMAS, M.P. (1772 - 1848)

Eldest son of Sir Francis Baring. Did not enter much into political life. Represented Wycombe in 1830, 1831, but resigned before the dissolution of parliament. He had a large art collection which was sold at Christie and Manson after his death. He was president of the Institution from 1835 - 1847.

BARNARD, BENJAMIN.

Banker of Cornhill. Listed as stockholder of E.I.C.

BARNARD, JOSIAH.

Banker.

BARNARD, WILLIAM. (1774 - 1849)

Mezzotint engraver. Practised in London. For some years held post of keeper of British Institution.

BARNES, GEORGE.

Merchant, of Barnes & Son, Crutched Friars.

BARNES, JOHN.

Of Lansdown Place. No information.

BARNES, RICHARD.

Of Cornhill. No information.

BARNOUIN, HENRY.

Of Ordnance Office. No information.

BARR, JOHN.

Of Hatfield St. No information.

Original ProprietorsBARRETT, Rev. JOSEPH.

Of Queen Square.

BASSEVI, GEORGE.

Of Montague St. No information.

BATTYE, JOHN.Stock^{broker}~~holder~~ and E.I.C. shareholder.BAYFORD, JOHN.

Proctor and Notary.

BAYLEY, DANIEL.

Of Aldermanbury. No information.

BEALE, DANIEL.

Of Fitzroy Square. Listed as E.I.C. stockholder.

BEAZLEY, (or BEAZELEY) CHARLES (c1756 - 1829)

Architect and surveyor, pupil of Sir Robert Taylor. Said to have 'Transacted the whole' of the latter's business as surveyor to the Bank of England during the last 7 years of his life and to have succeeded him as steward of the Governor's estates on his death in 1788. For nearly 50 years, he was district surveyor to the parishes of St. James and St. John, Clerkenwell. As architect to the Goldsmiths' Co. he made designs in 1804 for a new hall, which were not executed. He exhibited at the Royal Academy, between 1787 and 1806. Proprietor of Royal Institution.

BEDDOME, JOSEPHUS.

Drysalter of Beddome, Petrie & Co., Bearbinder Lane.

BEDWELL, JOHN.

Merchant of 30, Queen St., Cheapside.

BELL, HUGH.

Merchant, Aldersgate St.

BELL, CHARLES (1774 - 1842) (Later Sir Charles Bell)

Discoverer of distinct function of the nerves.

Original ProprietorsBELL, JAMES.

Sugar refiner of Angel Court.

BELL, JAMES. jun.

Presumably connected with above.

BELSHAM, Rev. THOMAS (1750 - 1829)

Unitarian divine. In 1798 he was appointed professor of divinity at Hackney College. (Priestley lectured there on history and philosophy). When the college was closed in 1796 he took private pupils.

BENNETT, JAMES

Of Bedford Square. No information.

BENNETT, THOMAS, jun.

Brandy merchant of T. Bennett & Son, Thames St.

BENSON, JOHN.

Of Bath, no information.

BENTLEY, JOHN.

Of City Road. No information.

BERTHON, P. jun.

Wine merchant of Finsbury Square.

BEVANS, JAMES

Member of firm of joiners and builders in City Road.

BEVINGTON, RICHARD.

Merchant of R. & T. Bevington, Gracechurch St.

BEVINGTON, SAMUEL.

Leather dresser of S. & H. Bevington, Grange Road.

BEVINGTON, TIMOTHY.

Merchant.

Original Proprietors.BINGLEY, ROBERT. F.R.S.

Proprietor of Royal Institution. Member of the Geological Society.

BINMER (or, possibly, Binner) JOHN.

Merchant and insurance broker of Swithin's Lane.

BIRCH, NICHOLAS.

Surgeon, Mansell St.

BIRKBECK, WILSON. (d 1812)

Iron founder in Nicholas Lane. Later lived at Stamford Hill. Cousin of George Birkbeck.

BIRKETT, DANIEL.

Cornfactor, of Birkett & Fothergill, Tower Hill.

BISH, THOMAS.

Stockbroker of Cornhill.

BLACK, ALEXANDER.

Of Duncan Terrace. Possibly secretary to British Plate Glass Manufactory, Albion Place, Blackfriars Road.

BLACK, JAMES.

Bookseller and stationer of Black, Parry and Kingsbury, Leadenhall St.

BLADES, JOHN.

Glass manufacturer of Ludgate Hill.

BLAKE, PHILIP.

Of Queen St. No information.

BLAKES, JOHN.

Merchant of Great St. Helen's.

BLAKESLEY, JOHN, jun.

Of Bishopsgate St. No information.

BLAND, RICHARD.

Of Pall Mall. No information.

Original Proprietors.BLEGBOROUGH, HENRY.

Surgeon, Dean St., Finsbury.

BLIZARD, Sir WILLIAM. (1743 - 1835)

Surgeon. In 1790 he was appointed surgeon to the London Hospital, having helped found the medical school there. He lectured in the medical school in anatomy, physiology and surgery. He was elected F.R.S. in 1787 and was twice president of the College of Surgeons.

BLIZARD, THOMAS (1772 - 1838)

Surgeon. Nephew and pupil of Sir William Blizard.

BLUNT, THOMAS.

Mathematical instrument maker to H.M. the King, Cornhill.

BODDINGTON, THOMAS.

Probably connected with firm of merchants, Philip Boddington, of Mark Lane. Director of Bank of England. Proprietor of Royal Institution.

BODDINGTON, SAMUEL. M.P. (c1767 - 1843)

Address given as Mark Lane, so probably connected with firm of merchants, P. Boddington. Proprietor of Royal Institution. Early member of the Geological Society.

BODDINGTON, T. jun.

As above. (Possibly related).

BODLEY, GEORGE.

Member of firm of Bodley, Etty & Bodley, 31, Lombard St., gold and silver laceman.

BODLEY, THOMAS.

As above.

BODLEY, W.H.

Possibly related to preceding.

BOLLAND, JOHN.

Hop merchant of Mark Lane.

Original Proprietors.BONAR, THOMPSON.

Underwriter at Lloyd's.

BORRADAILE, ABRAHAM.

Address: Fenchurch St. Either with firm of Borradaile and Clark, Furriers and Skinners, 121, Fenchurch St., or, of Borradaile & Atkinson, Merchants & Hat manufacturers, 34, Fenchurch St.

BORRADAILE, CHARLES.

See above.

BORRADAILE, JOHN.

See above.

BORRADAILE, RICHARDSON, M.P. (c1768 - 1835)

See above.

BORRADAILE, WILLIAM.

See above.

BORRADAILE, WILLIAM, jun.

See above.

BOSANQUET, CHARLES. (1769 - 1850)

Sub-governor, South Sea Co. (1805 - 38), governor, (1838 - 1850). From 1823 to 1836 he was chairman of the exchequer bill office. He disagreed with Ricardo's The High Price of Bullion a Proof of the Depreciation of Bank Notes (1809). Ricardo replied in "What is perhaps the best controversial essay that has ever appeared on any disputed question of political economy" (D.N.B.) and showed the truth of the chief statements in his report.

BOULDERSON, JOSEPH.

Address given as London Docks. No information.

BOULTON, MATTHEW. (1728 - 1809)

Engineer and leading industrialist, F.R.S. Played little part in the activities of the Institution. Also a proprietor of the Royal Institution.

Original Proprietors.BOURN, THOMAS. (1771 - 1832)

Compiler and teacher of writing and geography. In 1807 he published A Concise Gazetteer of the Most Remarkable Places in the World; with references to the principal historical events and most celebrated persons connected with them.

BOWDEN, THOMAS.

Drug broker of Camomile St.

BOWDEN, JAMES.

Of John St. No information.

BOWERS, N.W.

Comb maker of Cannon St.

BOWMAN, WILLIAM.

Banker, of firm of Taylor, Lloyds, Hanbury & Bowman, 60, Lombard St.

BOYD, EDWARD.

Of Broad St. No information.

BRADNEY, JOSEPH. jun.

Either: Apothecary of Lawrence Lane.

Or: Joseph Bradney (1739 - 1817). Merchant and writer on banking. Proprietor of Royal Institution.

BRADSHAW, EBENEZER. M.D.

Physician from Bath.

BRANDON, ISAAC.

Merchant in City of London.

BRANDON, MOSES.

Possibly related to preceding.

BRANT, RICHARD.

Of Highbury. No information.

Original Proprietors.BRAY, J.S.

Warehouseman in King St.

BRAY, WILLIAM.

As above.

BRICKWOOD, JOHN, jun.

Merchant of Billiter Square.

BRICKWOOD, N.

Corn factor of Broken Wharf.

BRIDGES, GEORGE. (c1763 - 1840)

Alderman, Lime St. Ward, 1811 - 26. M.P. for London, 1820 - 26.

BRIDGES, JOHN.

Of Charterhouse Square. Listed as E.I.C. stockholder.

BRIDGES, THOMAS.

Wine and Brandy Merchant, Mark Lane.

BRIGGS, EDMUND.

Draper of 149, Leadenhall St.

BRIGGS, WILLIAM

Attourney, Caroline St.

BRITTON, JOHN. (1771 - 1857)

Antiquary, topographer and miscellaneous writer. A friend of E.W. Brayley, with whose help he wrote Beauties of Wiltshire and Beauties of England and Wales. He was also the author of many other works of a similar nature.

BROCK, WILLIAM

Merchant of Brock & Le Mesurier, Warnford Court.

BROCKHURST, J.B.S.

Of Kings Arms Yard. No information.

Original ProprietorsBROGDEN, HENRY.

Possibly connected with Pieschell, Brogden & Co., merchants.

BROOK, CHARLES, M.P.

Serge factor: C.B. Rook & Co., Sambrook Court.

BROOKS, SAMUEL.

Possibly a glass manufacturer.

BROUGH, ANTHONY.

Merchant of Salvador House.

BROWN, BENJAMIN.

Linen draper of Brown, Rogers & Co., Cheapside.

BROWN, GEORGE.

Of Russell Square. No information.

BROWN, ROBERT.

Linen draper, of Cheapside.

BROWNE, EDWARD.

Of Raven Row. No information.

BROWNING, WILLIAM.

Merchant of Smithfield Bars.

BUCK, JOHN.

Of Chiswell St. No information.

BUDD, RICHARD, M.D. (1736 - 1821)

In 1780, elected physician to St. Bartholomew's Hospital, from which he resigned in 1801. 1777, elected F.C.P. Reached high official status in College of Physicians.

BUDD, J.S.

Of Battersea. No information.

BURGESS, WILLIAM.

Merchant of London St.

Original Proprietors.BURROWS, JAMES.

Surgeon of Bishopsgate St. Also listed as E.I.C. stockholder.

BURROWS (or Burrowes), WALTER.

Merchant of Bogle-French, Burrows & Canning, Broad St.

BURTON, GEORGE.

Possibly merchant and insurance broker of George & James Burton.

BURTON, JAMES.

Either: Merchant of above firm. (possibly)

Or: James Burton (1761 - 1837), Decimus Burton's father. The architect of the Russell Institution and a very successful London builder. Largely responsible for the development of the Foundling and Bedford estates in Bloomsbury. Proprietor of the Royal Institution.

BURY, JAMES.

Of Guilford St. No information.

BUSH, THOMAS.

Malt distiller, Wandsworth.

BUSHNAN, JOSEPH.

City comptroller, Guildhall.

BUTLER, DENNIS.

Of Surrey Square. No information.

BUTLER, JOHN.

Of Oxford Court. No information.

BUTLIN, JOHN.

Silk weaver of Bread St.

BUTLIN, THOMAS.

See above.

Original Proprietors.BYRN, JAMES.

Director of London Assurance Co.

CAIRNCROSS, A.

Surgeon of Pancras Lane.

CALLENDER, HENRY.

Merchant of Cornhill.

CAMERON, WILLIAM.

Of Walworth. No information.

CAMPBELL, JAMES.

Merchant of Campbell & Anderson, Warnford Court.

CANNING, HENRY.

Of Austin Friars. No information, although the name 'Canning' occurs in connection with merchant and banking concerns, so he may be connected with one of these.

CAREY, JAMES.

Of Jermyn St. No information.

CARRINGTON, Lord. F.R.S. (ROBERT SMITH) (1752 - 1838)

Member of banking firm of Smith, Payne & Co., Nottingham and London. In 1779 he became M.P. for Nottingham until his elevation to the peerage, 1797. He possessed large estates in Bucks and Lincs and was the first to be raised to the peerage from the 'financial class'. He was a proprietor of the Royal Institution, also F.R.S. and F.S.A. He was president of the L.I. from 1812 until 1827.

CARSTAIRS, JOHN.

Merchant of 28, Abchurch Lane.

CAZALET, PETER.

Banker. Director of Bank of England, 1792 - 4.

CAZENOVE, HENRY.

Merchant of Old Broad St.

Original ProprietorsCAZENOVE, JAMES. (c1744 - 1827)

See above.

CHADWICK, ADAM.

Of 8, Ironmonger Lane. No information.

CHALMERS, CHARLES.

Insurance broker of Chalmers & Cowie, Lime St.

CHAMPION, THOMAS.

Vinegar merchant of Old St.

CHAMPNEY, JOSEPH.

Linen draper of Bow Lane.

CHAPMAN, W.F.

Stationer of King St.

CHATER, ELEAZER.

Stationer of Grosvenor, Chater & Grosvenor, Cornhill.

CHATER, NATHANIEL.

Of Clapton. Possibly related to preceding.

CHAUNEY, C. SNELL.

Of Theobalds. Listed as E.I.C. stockholder.

CHRISTIE, WILLIAM.

Biscuit maker of Wapping.

CHRISTIE, JOHN.

Broker, of John & Robert Christie, Mark Lane.

CLARK, JOHN. (d 1818)

Member of firm of Borradaile & Clark, Furriers & Skinners, Fenchurch St.

CLARK, RICHARD. F.A.S. (1739 - 1831)

Lawyer, with considerable practice. Served as alderman, Sheriff and Lord Mayor of London. In 1785 was president of Christ's Hospital. In 1798 became Chamberlain of London and in same year resigned as alderman

Original Proprietors.CLARK, RICHARD. (cont.)

and as president of Christ's Hospital. Was also treasurer of Bridewell Hospital. Proprietor of Royal Institution. Fond of mixing in literary society.

CLARKE, ANTHONY.

Of Caroline Place. Probably stockholder of Anthony Clarke & Robert Marsden, 29 Princes St. Bank.

CLARKE, BRACEY, F.L.S.

Of Giltspur St. Veterinary surgeon.

CLARKE, CHARLES.

Of Thames St. No information.

CLARKE, J. ALDEN.

Of Mansion House St. No information.

CLARKE, RICHARD HENRY.

Of Wapping. Listed as E.I. C. stockholder.

CLARKSON, THOMAS.

No information.

COAPE, HENRY.

Merchant of Fenchurch St. Listed as E.I.C. stockholder.

COBB, JOSEPH.

Member of firm of Cobb & Co., merchants and paper warehouseman of Tudor St.

COBB, THOMAS.

Possibly connected with banking firm of Brown, Cobb & Co., Lombard St.

COBB, THOMAS, jun.

Connected with Thos. Cobb & Co., merchants of Tudor St.

COCK, THOMAS.

Of Plough Court. No information.

Original Proprietors.COHEN, JOSEPH.

Of Magdalen Row. No information.

COLES, GEORGE.

Member of firm of Leslie, Coles & M'Taggart, merchants of Abchurch Lane.

COLLINGRIDGE, SAMUEL.

Attorney. Clerk of Coachmakers & Coach Harness Makers' Company and Joint Secondary of City of London. Address: Coleman St.

COLLINGRIDGE, JOHN.

Address given as Coleman St., so presumably related to preceding.

COLLIER, THOMAS.

Of Hanover Square. No information.

COLLINS, WILLIAM.

Of Jewry St. No information.

COMBE, HARVEY CHRISTIAN, M.P.

Member of firm of brewers. Alderman for Aldgate Ward, 1790 - 1817.

CONSTABLE, JAMES.

Flour factor of Shad Thames.

CONSTABLE, MICHAEL.

As above.

COOKE, JOHN, M.D. (1756 - 1838)

In 1784, elected physician to London Hospital, a post he held for 23 years. In the same year he was admitted L.C.P. and F.C.P. in 1807. He was elected F.R.S. in 1817. In 1819, 20 and 21, he gave the Croonian Lectures at the College of Physicians and in 1832 gave the Harveian Oration. He was the author of A Treatise on Nervous Diseases, (1820 - 23) and was president of the Medico-Chirurgical Society, 1822, 23.

COOPER, ASTLEY, F.R.S. (1768 - 1841)

Surgeon. In 1792, elected anatomy professor at the College of Surgeons and in 1800 appointed surgeon to Guy's Hospital. Elected F.R.S. in 1802 and received the Copley Medal for Membrani Tympani of the Ear. In 1805

Original Proprietors.COOPER, ASTLEY (cont.)

he helped found the Medico-Chirurgical Society and became its first treasurer. In 1820 he performed a minor operation on George IV and received a baronetcy. 1827, president of College of Surgeons. A member of the Askesian Society.

CORNTHWAITE, J.T.

Of Sion College. No information.

CORP, RICHARD.

Chief clerk of Christ's Hospital. E.I.C. stockholder.

CORTISSOS, SAMUEL.

Of Clapton. May be connected with firm of De Pinna & Cortissos, public notaries.

COTTON, WILLIAM. (1786 - 1866)

Merchant and philanthropist. In 1838 received Telford Medal of Institute of Civil Engineers for a memoir of Huddart, his partner who had invented machinery for making cordage. He was a partner in the firm of Huddart & Co., manufacturers of registered cables at Limehouse. From 1821 - 1866 a director of the Bank of England and Governor, 1843 - 5. In 1844 he invented an automatic weighing machine for gold.

COWARD, JOHN.

Goldsmith of Coward & Smith, Cornhill.

COWIE, ROBERT.

Insurance broker of Chalmers & Cowie, Lime St.

COWIE, JOHN.

Merchant and E.I.C. stockholder.

CRISP, THOMAS.

Possibly law stationer.

CROWDER, W.H.

Attorney, Finsbury Square.

CURE, CAPEL.

Member of Lloyd's Committee of Subscribers. E.I.C. stockholder.

Original Proprietors.CURRY, JAMES, M.D. (d.1819)

Physician. Moved to London from Edinburgh in 1801. Became physician to Guy's Hospital. Advocate of mercurial remedies. An early member of the Geological Society.

CURTIS, Sir WILLIAM, Bart. (1752 - 1829)

Served as alderman and Sheriff of London. In 1790 elected M.P. for City of London which he held for 28 years. Created baronet, 1802. In 1785 established firm of Robarts, Curtis, Were & Co. Of great importance as head of Tory party in City. Supporter of Pitt and the war.

CURTIS, WILLIAM.

Son of above. Banker, succeeded to baronetcy on father's death.

CURTIS, TIMOTHY.

Of Southgate. No information.

DANIEL (or DANIELL), JAMES.

Possibly James Daniell, director of E.I.C. 1809 - 11, 1816, 1821.

DANN, RICHARD.

Attorney, of Broad St.

DAUBUZ, J.T.

Merchant of Broad St.

DAVIDSON, G.M.

Member of firm of Davidson & Son, net, line and twine makers, Fish Street Hill.

DAVIDSON, JAMES.

See above. Listed as stockholder of E.I.C.

DAVIDSON, JAMES, jun.

See above.

DAVIDSON, THOMAS.

Of Barnsbury Place, Islington. No information.

Original Proprietors.DAVIS, TH. C.

Of Fenchurch St. No information.

DAVY, THOMAS.

Drug merchant of T. Davy & J. Roberts, Gould Square.

DAWES, WILLIAM.

Of Chapel Place, Lambeth. A mathematical instrument maker of this name, (address not known) became mathematics master at Christ's Hospital.

DAWES, WILLIAM.

Of Finsbury Square. See above.

DAY, RALPH.

Of Aldersgate St. No information.

DEACON, WILLIAM.

Of Caroline Place. No information.

DEHORNE, ABRAHAM.

Of Surrey Square. No information.

DENNISON, RICHARD, M.D.

Educated at Edinburgh. Became L.C.P. in 1796. Had large midwifery practice in London.

DERBISHIRE (or DERBYSHIRE), PHILIP.

Surgeon, Chancery Lane.

DESHONS, JOHN.

Hat maker in Threadneedle St.

DICK, QUINTIN. (c1777 - 1858)

Merchant of King St. Extensive E. India proprietor.

DICKASON, THOMAS, jun.

Of Montague St. Listed as E.I.C. stockholder. Possibly connected with Thos. Dickason & Co., merchants, Fenchurch St.

Original Proprietors.DICKINSON, HENRY.

Bengal warehousekeeper for E.I.C.

DICKINSON, JOHN.

Possibly member of firm of Longman & Dickinson, stationers, Ludgate St.

DIMSDALE, W.P.

Banker of Dimsdale, Barnard, Son & Dimsdale. Cornhill.

DIVETT (or DIVET), THOMAS.

Mercer and woollen draper, Smithfield.

DOCKER, WILLIAM.

Apothecary and man-midwife of Leadenhall St.

DOCKSEY, JOHN.

Silk manufacturer of Goldsmith St.

DOMINICUS, GEORGE.

E.I.C. warehousekeeper, East India Wharf.

DOUGLASS, SAMUEL .

Merchant of Douglass & Shaw, America Square.

DOWN, RICHARD.

Banker of Richard Down, Henry Thornton, Peter Free & Edward Down, Bartholomew Lane.

DOXATT (or DOXAT), A.J.

Merchant of Doxatt & Divett, Bury Court.

DOXAT, JAMES.

See above.

DOXAT, J.A.

See above.

DRIVER, WILLIAM.

Of Surrey Square. No information.

Original Proprietors.DUDLEY, C.S.

Merchant of Gracechurch St.

DUNDAS, Lord. (THOMAS DUNDAS, 1741 - 1820) F.R.S., F.A.S.

Scottish landowner who wrote on crop rotation. Davy did analyses for him. Together with Lord Dundonald, founded first soda-producing plant in Scotland. Manufactured chemicals at Dalmuir. Patron of William Symington, the steam boat engineer. Governor of Forth and Clyde Canal Co. Proprietor of Royal Institution.

DUNSTON, JOHN.

Surgeon of Broad St. An early member of the Geological Society.

DURANT, ENOSH.

Insurance and silk-broker in King's Arms Yard.

DUVAL, DAVID.

Merchant.

EADE, GEORGE.

Furrier of Eades & Swinburn. Fleet St.

EADE, WILLIAM.

Address: Minorities. No information.

EDWARDS, THOMAS.

Merchant of Coleman St.

EDWARDS, WILLIAM.

Jeweller of Coleman St.

EDWARDS, EVAN.

Address: St. Paul's Churchyard. No information.

ELDRED, THOMAS.

Of Newington, Surrey, although there was a coach plater and brass founder of this name with a business in London Wall.

Original Proprietors.ELIASON, DANIEL.

Merchant.

ELLICE, EDWARD. (1781 - 1863)

Ship owner for E.I.C., also listed as stockholder of E.I.C. M.P. for Coventry 1818 - 1826 and 1830 to death. Secretary to Treasury, 1830 - 32.

ELLIOT, CHARLES.

Of Clapham. No information.

ELLIS, THOMAS FLOWER.

Stockbroker.

EMES, WILLIAM.

Ship and insurance broker of Emes, Mollar & Emes, Church Row, Fenchurch St

ENTWHISTLE, HENRY.

Of Mildred's Court. No information.

ESDAILE, JAMES.

Of J. & J. Esdaile, army accoutrement makers, Bunhill Row.

ESDAILE, JAMES. jun.

Of Bloomsbury Square. Presumably connected with above,

ETTY, WALTER.

Member of firm of Bodley, Etty & Bodley, gold and silver lacemen, Lombard St.

ETTY, WILLIAM.

See above.

EVANS, J.J.

Of Staining Lane. No information.

EYKYN, JOHN.

Dealer in foreign and British spirits, of Smithfield Bars.

EYKYN, RICHARD.

See above.

Original Proprietors.FARDON, WILLIAM.

Printer, of Phillips & Fardon, George Yard. This firm did most of the L.I.'s printing in the early years of the Institution.

FARLEY, JOHN.

Of Clapham. No information.

FARLEY, THOMAS, jun.

Of Spital Square. No information.

FARMER, RICHARD.

Oil of Vitriol maker of Kennington.

FARMER, CHARLES.

Of St. John St. No information.

FARRE, JOHN, M.D. (1775 - 1862)

One of the founders of the Royal London Ophthalmic Hospital, he was physician there for 50 years. He was the author of several medical works.

FAVELL, SAMUEL.

Of Grove Hill. No information.

FAVENC, ABRAHAM.

Merchant of Size Lane.

FAYLE, BENJAMIN.

Merchant of Lombard St. Early member of the Geological Society.

FENN, JOHN.

Hosier and wholesale linen draper, Cornhill.

FENN, NATHANIEL.

Address given as Hackney. However, he was an E.I.C. stockholder and in the stock ledger his address is first given as Botolph Lane and later as Hackney. It seems, therefore that he was associated with the business in Botolph Lane and was the father of the following:

Original Proprietors.FENN, NATHANIEL.

Grocer, of Stevenson, Fenn, Stevenson & Hewson, grocers, of Botolph Lane. A Nathaniel Fenn is listed as a proprietor of the Royal Institution but it is not possible to be certain which one it was although the 'Hackney Fenn' is more likely.

FENNEL, RICHARD, jun.

Merchant of Richard Fennel & Son, Bush Lane.

FENNEL, SAMUEL.

Of Bush Lane, so presumably connected with above.

FENTON, P.J.

Of Hampstead. No information.

FIELD, HENRY. (1755 - 1837)

Apothecary. In 1807, he was elected Apothecary to Christ's Hospital. He lectured gratis for the Apothecaries' Society, together with Joseph Hurlock, which resulted in the regular establishment of lectures by the Society. He helped towards obtaining an Act of Parliament in 1815, which enforced an examination and professional standards for candidates for practising apothecaries in England and Wales. He was deputy treasurer of the Society and treasurer of the branch which supplied drugs to the East India Co., the navy and the general public.

FLIGHT, THOMAS.

Stationer of Flight, Williams & Cooper, Holborn.

FLOWER, CHARLES.

Merchant of Finsbury Square. Alderman, Cornhill Ward, 1801 - 34. Created baronet, 1809.

FORD, SAMUEL.

Of Fenchurch St. No information.

FORMAN, WILLIAM.

Of Steelyard. No information.

FORSTER, T.F.

Of Threadneedle St. No information.

Original Proprietors.FOSTER, JOSEPH.

Calico printer at Bromley.

FOSTER, THOMAS.

See above.

FOWLER, DANIEL.

Merchant of Fowler & White, Billiter Lane.

FOX, JOSEPH.

Surgeon-dentist of Lombard St. A founder member of the Askesian Society.

FRAMPTON, ALGERNON, M.D. (1766 - 1842)

Educated at Cambridge and London. In 1800, elected physician to the London Hospital.

FRAMPTON, THOMAS.

Grocer of Leadenhall St.

FRANKLIN, J.G.

Of Finsbury Square. No information.

FRASER, WILLIAM.

Merchant of Queen Square and E.I.C. stockholder.

FRENCH, JOHN.

Of Stamford Hill. No information.

FRESHFIELD, WILLIAM, jun.

Attorney of Swithin's Lane.

FROST, THOMAS.

Of Goldsmith St. No information.

FROST, THOMAS, jun.

See above.

FRY, JOSEPH.

Either: member of firm of Fry & Sons, wholesale tea dealers, St Mildred's Court. Or: W.S.W. & J. Fry, Bankers, St Mildred's Court.

Original Proprietors.FRY, WILLIAM.

See above.

FRYER, GEORGE.

Member of firm of Fryer, Telford, Liddell & Smallman, Blackwell Hall factors, Aldermanbury. E.I.C. stockholder.

FULTON, HENRY.

Gauze and muslin manufacturer of Watling St.

FURBOR, JOHN.

Of Coleman St. No information.

GAITSKELL, HENRY.

Distiller.

GAITSKELL, THOMAS.

Distiller.

GAITSKELL, WILLIAM.

Surgeon from Rotherhithe.

GELEDNEKI, ANTHONY.

Merchant of Broad St.

GHRIMES, WILLIAM.

Woollen draper and merchant of Ludgate St.

GIBSON, JAMES.

Member of firm of Stratton & Gibson, Russia merchants of Gt. St. Helen's.

GILBERT, WILLIAM.

Mathematical instrument maker of Leadenhall St. In 1799, a Mr. William Gilbert was listed as an annual subscriber (2 gns) of the Royal Institution.

GILES, PETER.

From Streatham. Proprietor of Royal Institution.

Original Proprietors.GILES, WILLIAM, jun.

Stockbroker of Surrey Square.

GILLIES, WILLIAM.

Corn factor of Gillies & Barclay, Throgmorton St.

GOLD, JOYCE.

Printer of Shoe Lane.

GOLDSMID, ABRAHAM. (c1756 - 1810)

In 1777 he began business as a bill broker with his elder brother, Benjamin. His financial connections were gradually extended and after 1792 his wealth rapidly increased through dealings with the government. Abraham Goldsmid was joint contractor, together with the firm of Baring Bros. for a ministerial loan of £14 million in 1810. Sir Francis Baring's death added to his difficulties, he was unable to meet his liabilities and he committed suicide in September, 1810.

GOLDSMID, ABRAHAM, jun.

Merchant of Leman St.

GOLDSMID, ALEXANDER.

Member of firm of A. Goldsmid, Son & D. Eliason, merchants of Leman St.

GOLDSMID, BENJAMIN. (c1753 - 1808)

Merchant and financier, in partnership with his brother, Abraham. Was married to daughter of an East India merchant.

GOLDSMID, G.

Merchant.

GOLDSMID, ISAAC LYON. (1778 - 1859)

Member of firm of Mocatta & Goldsmid, bullion brokers. Treasurer of University College Hospital, 1839 - 57. Elected F.R.S. in 1828. From 1825 he took a prominent part in the foundation of University College, London and gave impetus to the scheme by the acquisition of the Gower St. site at his own risk, which was shared with John Smith and Benjamin Shaw. He also endowed a chair of geology at University College. In 1834 he gave help in the foundation of U.C. Hospital. With Elizabeth Fry and Peter Bedford he worked for the reform of the penal code and prison improvement. He was devoted to the cause of Jewish emancipation. He was created a baronet in 1841, the first Jew so honoured.

Original Proprietors.GOLDSMID, ASHER.

Broker and merchant of Leman St.

GOOCH, GEORGE.

Of Brunswick Square. No information.

GOODBEHERE, SAMUEL (d.1818)

Member of firm of Goodbehere, Wigan & Bult, goldsmiths of Cheapside. Alderman, Cheap Ward, 1809 - 18.

GORDON, A.

Merchant of 35, Ely Place.

GRAHAM, WILLIAM, jun.

Of Fig Lane. Listed as stockholder of E.I.C.

GRANT, CHARLES, M.P. (1746 - 1823)

Statesman and philanthropist. In 1767 went to India in a military capacity but, on arrival, obtained a civil service post. In 1781 he became commercial resident in charge of silk manufacturing at Malda and became senior merchant in 1784. He later became a member of the Board of Trade at Calcutta and returned to Britain in 1790. He served as M.P. for Invernesshire and in 1804 was deputy chairman of the E.I.C. and chairman the following year.

GRANT, ANDREW.

Of Fenchurch St. No information.

GRAY, EDWARD.

Draper, of Gray, Freeman & Co., Cornhill.

GRAY, JOHN.

Merchant of Change Alley.

GREEN, JOHN.

Merchant of John Green & Co., Canterbury Square.

GREEN, WILLIAM.

See above.

Original Proprietors.GREEN, JOHN.

Of New Broad St. No information.

GREEN, WILLIAM.

Of Coleman St. No information.

GREGG, THOMAS.

Of Arlington St. No information.

GRENFELL, GEORGE.

Of Castle Baynard. No information.

GRENSIDE, JOHN.

Corn factor of Mark Lane.

GRIFFIN, JOHN.

Member of firm of N. & John Griffin, weavers, of Steward St.

GRILL, CLEAS.

Merchant of Dunster Court.

GRILL, C.H.

See above.

GROSVENOR, W.L.

Stationer of Grosvenor, Chater & Grosvenor, Cornhill.

GUEST, JOHN.

Possibly a merchant.

GURNEY, JOHN.

Recorder of Bridport, Home Circuit, and Kent, London, Middlesex and Westminster Sessions.

HADLEY, SAMUEL.

Wine and brandy merchant, Swithin's Lane.

Original ProprietorsHAIGHTON, JOHN, M.D. (1755 - 1837)

Physician and physiologist. In 1790, he was awarded the silver medal of the London Medical Society for a paper on Deafness. He performed numerous physiological experiments and published papers on his researches.

HAINWORTH, WILLIAM.

Shawl and silk manufacturer of Hainworth and Heritage, Watling St.

HALFORD, J.F.

Of Broad St. Buildings. Listed as E.I.C. stockholder.

HALL, HENRY.

Surgeon and apothecary of Friday St.

HALL, WALTER.

Of Merton. No information.

HAMILTON, WILLIAM, M.D. (1758 - 1807)

Educated at Glasgow and Edinburgh. Became a Licentiate of the College of Physicians in 1786 and was appointed physician to the London Hospital in 1787.

HANBURY, BENJAMIN.

Member of firm of Hanbury, Son & Co., carpet and blanket manufacturers of Heckmondwike, Yorks. and 9, Bartlett's Buildings, Holborn.

HANBURY, JOHN CAPEL.

Member of firm of Hanbury, Crefer & Petty, grocers, of Threadneedle St.

HANCOCK, MATTHEW.

Hosier of Hancock & Wakefield, Milk St.

HANKEY, AUGUSTUS ROBERT.

Member of banking firm of Robert Hankey, Stephen Hall, Augustus Robert Hankey & William Alers, 7, Fenchurch St.

HANKEY, ROBERT.

See preceding.

HANKEY, JOHN PETER. (d. 1807)

Goldsmith. Alderman for Candlewick Ward, Jan. 1806 - May 1807.

Original Proprietors.HANSON, JOHN.

Of Russell Square. No information.

HARDCASTLE, JOSEPH.

Merchant, of Hardcastle & Co., Old Swan.

HARDY, WILLIAM.

Wholesale linen draper of Whitechapel.

HARGRAVE, Rev. SMITH.

Of Charterhouse Square. No information.

HARMAN, JEREMIAH.

Director of Bank of England, 1794 - 1827, governor 1816 - 1818.

HARRIS, JOSEPH.

Member of firm of Joseph Harris, Son & Co., tea dealers of Abchurch Lane.

HARRIS, JOSEPH OWEN.

See above.

HARRIS, R.P.

Corn and seed factor of R. Harris & Son, Fenchurch St.

HARRIS, WILLIAM.

Optician of Holborn. Also of Hamburg. Worked for David Brewster - made him a goniometer in 1809 and with whom he took out a patent for a micrometer telescope in 1811.

HARRISON, BENJAMIN. (1771 - 1856)

Fourth son of Benjamin Harrison (1734 - 97), treasurer of Guy's Hospital. Succeeded his father in the post in 1797, and remained for 50 years, governing the hospital and managing its estate. He introduced many improvements in cooperation with Sir Astley Cooper. In 1825 he established Guy's as a complete medical school, separate from St. Thomas's. In 1837, the Charity Commissioners made an enquiry into the administration of the hospital which Harrison resented, although no abuses were discovered. He was F.R.S. and F.S.A. In addition to his post at Guy's (unsalaried) he was deputy governor of Hudson's Bay Co. and the South Sea Co. and chairman of the Exchequer Loan Board. He was selected as one of the three Appeal Commissioners for the City of London when income tax was first imposed.

Original Proprietors.HARRISON, GEORGE.

Possibly a builder - one of the same name was involved in the development of Grosvenor Place.

HARRISON, JOSEPH.

Merchant, of Cleas Grill & Harrison, of Dunster Court.

HARRISON, MATTHEW.

Address given as Guy's Hospital, so presumably related to Benjamin Harrison.

HARVEY, JOSEPH.

Of Gracechurch St. No information.

HASE, HENRY.

Of Brunswick Square. No information.

HATHAWAY, W.S.

Possibly W.M.S. Hathaway, a member of Lloyd's Committee of Subscribers.

HAWES, BENJAMIN.

Member of firm of T & B Hawes, soap makers. Old Barge House. Christ Church.

HAWES, THOMAS.

See above.

HAWES, WILLIAM, M.D. (1736 - 1808)

Founder of Royal Humane Society. About 1773 he became well-known for his efforts to revive those apparently dead of drowning or suffocation.

HEADINGTON, R.C.

Surgeon, Broad St. Buildings.

HEATHCOTE, JOHN.

Merchant of J. Heathcote & Co., Love Lane.

HEATHFIELD, RICHARD.

Address given as Epping Forest. Possibly connected with firm of Matthew & Richard Heathfield, merchants.

Original Proprietors.HECKER, JOHN HENRY.

Merchant, of Finsbury Square.

HENCKELL, GEORGE.

Insurance broker, Austin Friars.

HENNINGS, C.F.

Of Fowkes Buildings. No information.

HENNINGTON, BERNARD.

Of Fenchurch St. No information.

HETHERINGTON, MELLOR.

Tea dealer, of Hetherington & Maskew, Nicholas Lane.

HETHERINGTON, T.W.

See above.

HEWSON, JOHN KNEE.

Of St. Mary's Hill. No information.

HEWSON, D.S.

Of Bromley. No information.

HEYGATE, JAMES.

Merchant of Aldermanbury. E.I.C. stockholder.

HEYGATE, WILLIAM. (1782 - 1844)

Merchant of Aldermanbury, E.I.C. stockholder. Alderman, Coleman St. Ward, 1812 - 43, created baronet, 1831 and appointed Sheriff, 1843.

HIBBERT, GEORGE. (1757 - 1837)

Collector and merchant. He settled in London as junior partner in a West India House, eventually becoming head of the firm. He was an alderman from 1798 to 1803 and from 1806 to 1812 was M.P. for Seaford, Sussex. He was Whig in politics. In conjunction with Robert Milligan he played a large part in the establishment of the West India Docks and was chairman of the West India merchants until 1831 and agent for Jamaica. He was elected F.R.S. in 1811 and F.S.A. in the following year. He

Original Proprietors.HIBBERT, GEORGE. (cont.)

was a patron of art, a collector of books and pictures and also formed a collection of exotic plants at his house at Clapham. The sale of his Library in 1829 lasted 42 days and the catalogue filled 482 pages. He was president of the Institution from 1810 - 1812 and from 1827 - 1835.

HIBBERT, JOSEPH.

Wine and brandy merchant of Hibbert & Sons, of Crutched Friars.

HIBBERT, WILLIAM.

Member of firm of George, Robert & William Hibbert, merchants of Mincing Lane.

HICK, CHARLES WILLIAM.

Hatter, of Hick, Thornton & Co., Cheapside.

HIGGIN, JOHN.

Merchant of Higgin, Crawford & Co., London St.

HIGGINS, JOHN.

Of Kingsland. No information.

HIGHMORE, ANTHONY, (1758 - 1829)

Legal writer. Commenced practice as a solicitor in 1783. He was a believer in vaccination. Secretary of the London Lying-in Hospital. Author of several legal works.

HIGHMORE, ANTHONY, jun.

Merchant.

HILL, GEORGE.

Muslin manufacturer of Aldermanbury.

HILLIER, NATHANIEL.

Of Stoke Park. No information.

HILTON, JOHN.

Of Ironmonger Lane. No information.

Original Proprietors.HINCKLEY, HENRY.

Of Guilford St. Possibly an insurance broker.

HINCKLEY, JOHN. F.A.S.

Possibly John Hinckley (1765 - 1814), proprietor of the Royal Institution. Interested in literary pursuits. Wrote accounts of his travels.

HINDMAN, JOSIAH.

Attorney. Clerk to Plasterers' and Glaziers' Company.

HINGESTON, JOHN.

Chemist, of J. & J. Hingeston, Cheapside.

HOARE, HENRY, F.A.S. (1750 - 1828)

Banker of firm of Henry Hoare, Henry Hugh Charles Hoare, William Henry Hoare & Henry Merrick Hoare, of 37, Fleet St. Proprietor of Royal Institution.

HOARE, HENRY WILLIAM, (1776 - 1819)

Banker - see above.

HOARE, SAMUEL.

Banker, of Hoare, Hill & Barnet, 62, Lombard St.

HOARE, SAMUEL, jun. (1783 - 1847)

See above.

HOBSON, WILLIAM.

Builder, Stamford Hill. An early member of the Geological Society.

HODGES, EDWARD.

Address given as Hackney. May be merchant of same name 'over Royal Exchange.'

HOLDEN, JOSEPH.

Wine and brandy merchant of Holden & Son, Lombard St.

HOLDEN, WILLIAM.

Secretary to West India merchants.

HOLDER, STEPHEN.

Merchant.

Original Proprietors.HOLFORD, CHARLES.

Of Hampstead. No information.

HOOD, THOMAS.

Bookseller, of Poultry.

HORNE, WILLIAM.

Coal merchant, of Bankside.

HORSLEY, M.C.

Of Broad St. No information.

HOUGHAM, SOLOMON.

Of Charterhouse Square. Possibly connected with S. & C. Hougham, goldsmiths of Aldersgate St.

HOY, MICHAEL.

Russia merchant, of Size Lane.

HUDDART, JOSEPH, F.R.S. (1741 - 1816)

In 1778, appointed commander of E.I.C. ship, 'Royal Admiral' and made four voyages to the east. He surveyed coasts and ports and constructed charts of Sumatra and the coast of India from Bombay to the mouth of the Godavery. He also prepared a chart of St. George's Channel. He retired from the E.I.C.'s service in 1788 and spent the next three years surveying in the Hebrides. He was elected F.R.S. in 1791. Some years earlier, he had invented a method of manufacturing rope 'for equal distribution of strains upon the yarns', and set up in business, after 1791, to manufacture rope. He was a director of the E.I.C. (See also Cotton, William)

HUDSON, WILLIAM.

Of Dulwich. No information.

HUGHAN, THOMAS.

Of Fenchurch St. No information.

HUGHES, RICHARD, jun.

Probably connected with 'Temple of the Muses' bookshop in Finsbury Square.

HULME, ARDERN.

Banker, of Jones, Lloyd, Hulme & Co., 43, Lothbury.

Original Proprietors.HULLETT, JOHN.

Merchant, of Hullett & Co., Broad St. Buildings.

HUMBLE, JOHN.

Of Walcot Place. No information.

HUNT, JOHN N.

Of Hackney. No information.

HUNT, HENRY.

Of Jeffries' Square. No information.

HUNTER, JOHN.

Director of E.I.C. , 1781 - 1802.

HURLE, HENRY.

Attorney, of Cloak Lane.

HURLOCK, JOSEPH, F.L.S.

Director of E.I.C.; proprietor of the Royal Institution. He later became a physician and was interested in charity. Together with Henry Field (see above) he lectured for the Apothecaries' Society, which resulted in the establishment of regular lectures by the Society.

HURST, THOMAS.

Probably connected with the firm of Longman, Rees, Hurst & Orme, booksellers, of Paternoster Row.

INGLIS, Sir HUGH, Bart. (1744 - 1820)

Merchant. For many years, he was a director of the E.I.C. and was chairman in 1797.

INGLIS, JAMES.

Merchant, of Inglis, Ellin & Co., Mark Lane.

INGLIS, JOHN.

Member of firm of Inglis, Ellin & Co., merchants, of Mark Lane. Director of E.I.C.

Original Proprietors.INNES, JAMES.

Merchant, of City Chambers.

IRVING, JOHN. (d.1853)

Partner in the firm of Reid, Irving & Co., merchants. Executed a contract for £1,500,000 for clothing the Russian army in 1816 - 17. He was chairman of the Alliance, British & Foreign Fire & Life Assurance Co., 1824 - 46.

JACKS, JAMES.

Of Grove Hill, Camberwell. No information.

JACKSON, JOHN.

Merchant, of Broad St.

JACKSON, SAMUEL, F.R.S., F.A.S.

Of Back Lane, St. George's-in-the-East. Rope Maker.

JACKSON, JOHN.

Merchant of Jackson, Goodchild & Co., Dowgate Iron Wharf.

JACOB, JOHN.

Merchant, of J. & W. Jacob, Newgate St.

JACOB, WILLIAM.

See above.

JAMES, JOSEPH.

Of Esher. No information.

JAMES, RICHARD.

Of South St. No information.

JAMESON, WILLIAM.

Merchant and insurance broker, of Jameson, & Alers, Distaff Lane.

JARMAN, G.F.

Merchant, of Jarman & Pope, 86, Cannon St.

Original Proprietors.JEFFERY, GEORGE.

Merchant, of G. Jeffery & Sons, Throgmorton St.

JEFFERY, JOHN.

See above.

JENNER, EDWARD, M.D., F.R.S. (1749 - 1823)

The discoverer of vaccination. In 1770 he became a pupil of John Hunter and on Hunter's recommendation was employed by Sir Joseph Banks to prepare some of the specimens brought home in 1771 from Cooke's voyage. In 1773, he returned home to Berkeley (Glos.) to practise. Hunter continuously stimulated Jenner to make observations on the temperature of animals, eels and many other subjects and asked him to send salmon spawn and other specimens. Formed a medical society which met at the Fleece Inn, Rodburgh. At these meetings, he read papers on Angina Pectoris, Ophthalmia and Valvular Disease of the Heart. Cowpox also received some mention at these meetings. Served as a Visitor from 1806 to about 1812, but not otherwise active in the Institution.

JENNER, J.A.

Merchant, of J.A. Jenner & Co., Coleman St.

JELlicoe, JOSEPH.

Of Fenchurch St. No information.

JESSOP, J.S.

Lawyer of Inner Temple, on the Home Circuit.

JOHNSON, CHARLES.

Apothecary of Swan St. E.I.C. shareholder.

JOHNSON, JOSEPH, (1738 - 1809)

Bookseller and publisher of St. Paul's Churchyard. In 1772 he began to publish for Priestley. He brought out many important works in medicine and surgery and was the earliest publisher of Cowper and Erasmus Darwin.

JOHNSTONE, JOHN.

Land surveyor. Wrote book on drainage of land in 1800.

JONES, JOSEPH.

Apothecary, Gracechurch St.

Original Proprietors.JONES, SAMUEL.

Member of firm of W. & S. Jones, opticians, Holborn.

JONES, WILLIAM.

See above.

JOURDAN, JOHN.

Weaver of Spital Square.

JUCKES, JAMES.

Attorney, of Billiter Square.

KAY, JOSEPH.

Either: Jospeh Kay (1775 - 1847), surveyor to the Foundling Hospital.
Or: Joseph Kaye, attorney, Swithin's Lane.

KELLY, PATRICK. (1756 - 1842)

Mathematician and astronomer. For many years he was the master of a successful school, called the 'Mercantile School' in Finsbury Square. He became mathematical examiner to Trinity House and was acquainted with Maskelyne, Sir J. Hersel, Hutton and other scientists. He was also an authority on coinage and currency.

KEMBLE, HENRY.

Of Watling St. No information.

KEMBLE, THOMAS.

Of Mincing Lane. No information.

KENNION, JOHN. jun.

Member of firm of J. Kennion & Son, brokers, Nicholas Lane.

KENNION, P.

Member of firm of P. Kennion & Co., merchants and insurance brokers, South St.

KENSINGTON, HENRY.

Of Bridge St. N o information.

Original Proprietors.KENSINGTON, EDWARD.

Of same address as above, so presumably related. No information.

KENT, SAMUEL LUCK.

Member of firm of Kent, Luck & Kent, carpet warehousemen, London Wall.
Secretary of the Institution, 1824 - 29.

KENT, WILLIAM.

See above.

KEY, THOMAS.

Surgeon, of Fenchurch St.

KEYSER, ISAAC.

Of America Square. No information, though may be connected with following:

KEYSER, R.A.

Merchant of 3, Savage Gardens, Tower Hill.

KIERNAN, JAMES.

Of Lambeth. No information.

KINDER, ROBERT.

Merchant, of Thomas Kinder & Co., City Chambers.

KING, JOSEPH.

Of Mark Lane. E.I.C. officer - clerk to the committee for private trade.

KINGSTON, JOHN, jun.

Wine merchant. A director of the Sierra Leone Co., a project of William Wilberforce to increase commerce and abolish the slave trade. A proprietor of the Royal Institution.

KINGSTON, HENRY.

Gives same address as above, so possibly related.

KINGSTON, ROBERT.

Merchant, of 80, Coleman St.

Original Proprietors.KIRKMAN, P.

Probably connected with the 'Temple of the Muses' bookshop in Finsbury Square.

KITCHENER, WILLIAM. (d.1807)

Tea dealer of Finsbury Place.

KNIGHT, RICHARD. (d.1844)

Of R. & G. Knight, ironmongers, Foster Lane. Founder member of the Geological Society.

KNIGHT, RICHARD.

Grocer and tea-dealer, Gracechurch St.

KNOWLYS, T.

Sugar refiner, Thames St.

KYMER, JOHN.

Broker of Kymer, M'Taggart & Co., 6, Scot's Yard.

LACKINGTON, GEORGE. (1768 - 1844)

Bookseller, one of the proprietors of 'Temple of the Muses' in Finsbury Square. The main feature of the business was selling cheaply in large quantities for cash. Other members of the firm were Allen and Hughes and subsequent partners were: A. Kirkman, Mavor and Jones. In 1822, the business was conducted under the title of Lackington, Hughes, Harding, Mavor and Lepard.

LAFOREST, WILLIAM.

Wine merchant of Laforest & Jones, College Hill.

LANE, THOMAS.

Of Goldsmiths' Hall. E.I.C. proprietor.

LANG, ROBERT.

Merchant of Lang, Turing & Co., Finsbury Square.

LANGSTON, JOHN. (d.1812)

E.I.C. shipowner. Banker of Langston, Towgood, Cazalet & Co., 29, Clements Lane, Lombard St. Defended E.I.C. interests in parliament. An honorary member of the board of agriculture. Proprietor of the Royal institution.

Original Proprietors.LANGSTON, (or LANGTON), ZACHARY.

Manchester warehouseman, Bread St.

LARGE, JAMES.

Of Highbury. No information.

LARKINS, JOHN P.

Ship owner of Blackheath.

LAVIE, G.

Attorney, Frederick's Place.

LAWRENCE, EFFINGHAM.

Merchant, of E. Lawrence & Son, Trinity Square.

LAWRENCE, WILLIAM EFFINGHAM.

See above.

LAWSON, JOHNSON.

Of Chancery Lane. Proprietor of the Royal Institution.

LEA, RICHARD.

Weaver of Lea, Carmichael & Co., Old Jewry. Alderman, Coleman St. Ward, 1803 - 8.

LEE, RICHARD.

Member of firm of Richard, William & Edward Lee, Turkey merchants, of Brook St.

LEE, STEPHEN.

Address given as London Assurance, so presumably connected with that company.

LEE, JAMES.

Of Newington Green. No information.

LEECH, JOHN.

Wine merchant of Leech & Dallimore, Ludgate Hill.

LEES, WILLIAM.

Address: Tower. No information.

Original Proprietors.LEESE, LEWIS.

Surveyor of Copthall Court.

LEIGHTON, Sir WILLIAM.

Alderman, Billingsgate Ward, 1799 - 1821. Knighted May, 1800.

LE MESURIER, B.

Merchant of Brock & Le Mesurier, Warnford Court.

LE MESURIER, F.

See above.

LE MESURIER, HAVILAND. (1758 - 1806)

Partner in firm of P. & H. Le Mesurier, merchants. In 1794, appointed commissary general of the army.

LE MESURIER, PAUL. (1755 - 1805)

Signed as a proprietor in 1805, but died before Charter was granted. Brother of Haviland Le Mesurier. In 1783 became a director of E.I.C. He served as alderman for Dowgate Ward, as sheriff in 1787 and Lord Mayor of London in 1794. He was active in opposing Fox's India Bill in 1783.

LESLIE, P.

Merchant of Leslie, Coles & M'Taggart, Abchurch Lane.

LETTSON, JOHN COAKLEY, M.D.(1744 - 1815)

Educated at Edinburgh. In 1769 obtained M.D. at Leyden and became a licentiate of the College of Physicians in the following year. He was elected F.S.A. in 1770 and F.R.S. in 1773. He also joined many medical and scientific societies. He was noted for his philanthropy rather than his medical activities. In 1770 he helped found the General Dispensary in Aldersgate St., and was involved in the formation of the Royal Humane Society.

LETTSON, S.F.

Of Fulham. Son of preceding. No information.

LEVIN, ZADIK.

Merchant of Jewry St.

LEVY, ANGELO.

Merchant of Devonshire Square.

Original Proprietors.LEWIN, SAMUEL.

Of Hackney. No information.

LEWIS, THOMAS.

Director of the Bank of England, 1791 - 1816. Proprietor of the Royal Institution.

LEWIS, WILLIAM.

Broker of John Lewis & Co., Walbrook. In 1799, listed as life subscriber (10gns) of Royal Institution.

LEWIS, GEORGE.

Ironmonger, of Lewis & Jones, Knightrider St.

LEWIS, ROBERT.

Of Camden Town. No information.

LINDSAY, MARTIN.

Of Charlton. No information.

LINDO, MOSES.

Broker, of Lemon St.

LOCK, CHARLES.

Address given as America Square. May be connected with firm of J. Lock & Co., lead merchants of America Square.

LOCKE, JOHN.

Ship owner for E.I.C.

LONG, BEESTON. (d.1820)

Member of firm of merchants, Samuel & Beeston Long. A director of the Bank of England, 1784 - 1820 and governor, 1804 - 6.

LONGMAN, GEORGE.

Stationer of Longman & Dickinson, Ludgate St.

LONGMAN, THOMAS NORTON. (1771 - 1842)

Bookseller and publisher, Paternoster Row.

Original Proprietors.LONSDALE, G.B.

Merchant and insurance broker of G.B. & R. Lonsdale, Birchin Lane.

LOUSADA, M.B.

May be a misprint for E.B. Lousada. In which case, he was Emanuel Baruh Lousada, a Jew of Portuguese extraction, a merchant. A proprietor of the Royal Institution.

LOYD, LEWIS.

Banker of Jones, Loyd, Hulme & Co., Lothbury.

LOYD, THOMAS.

See above.

LUBBOCK, Sir JOHN, M.P. (1774 - 1840) 2nd baronet.

Head of firm of Lubbock & Co., E.I.C. agent. Father of Sir John Lubbock, astronomer and mathematician. Proprietor of Royal Institution.

LUCK, JOSEPH.

Member of firm of Kent, Luck & Kent, carpet warehousemen, London Wall.

LUDLAM, WILLIAM, A.M.

Of Welbeck St. No information.

LUDLAM, JEFFREY.

Wholesale hosier, of Jeffrey Ludlam & Co., 5, Lad Lane.

MABERLEY, JOHN, M.P. (c1780 - 1845)

Attorney, of Maberley, Daniell & Co., Bedford Row.

MACAULAY, ZACHARY. (1768 - 1838)

Philanthropist. A friend of Henry Thornton and Thomas Babington. An active member of the Antislavery Society (1823).

MACKMURDO, E.L.

Merchant, of Mackmurdo, Hicks & Co., Bread St., Cheapside.

Original Proprietors.MACKMURDO, E.L. jun.

See above.

MACKMURDO, ROBERT.

Address given as Layton. May be connected with Mackmurdo, Hicks & Co.

MACTAGGART, JOHN.

Address: Knott's Green, Layton. May be connected either with Kymer, M'Taggart & Co., brokers, or with Leslie, Coles & M'Taggart, merchants.

MAGNIAC, FRANCIS.

Merchant, of St. John's Square.

MAINWARING, G.B.

Banker of 80, Cornhill. Treasurer for Middlesex.

MAIR, JOHN, jun.

Member of firm of Mair, Son, Thomas & Co., muslin manufacturers and Scotch lawn warehousemen of Friday St.

MAITLAND, ALEXANDER.

Merchant of King's Arms Yard.

MALLARD, P.

Sail maker, Wapping.

MALTBY, THOMAS.

Director of Albion Fire and Life Assurance Co.

MALLER, J.L.

Of Somerset Place. No information.

MANFIELD, WILLIAM.

Of Bennet Street, Blackfriars Rd. No information.

MANGLES, JAMES.

Member of firm of J. & J. Mangles, oilmen and ship's chandlers, Wapping.

MANGLES, JOHN.

See above.

Original Proprietors.MANNING, WILLIAM. M.P. (1763 - 1835)

Member of firm of Manning, Anderton & Bosanquet, merchants of Fenchurch St. A director of the Bank of England. Proprietor of the Royal Institution.

MANSER, WILLIAM.

Member of firm of Manser, Lowe & Pryer, skimmers of Tooley St.

MARSDEN, ROBERT.

Stockbroker, Princes St.

MARSDEN, WILLIAM.

Either: Cotton broker, of Abchurch Lane.

Or: William Marsden (1754 - 1836) E.I.C. civil servant who operated an East India agency in London. Secretary of the Admiralty. F.R.S., known in London scientific circles.

MARSH, T.C.

Of Trinity Square. No information.

MARTEN, R.H.

Of Prescott St. No information.

MARTER, WILLIAM.

Address given as East India House, so presumably an E.I.C. employee.

MARTIN, F.P.

Merchant, of Frederick's Place.

MARTINEAU, JOHN.

Member of firm of D, P. & J. Martineau, brewers, Lambeth.

MARTINEAU, PETER.

Address given as Dulwich Hill, but probably connected with firm of brewers at Lambeth.

MARTINEAU, PETER, jun.

Member of firm of brewers at Lambeth.

MARTINEAU, DAVID.

Possibly connected with brewery firm, as above. Address: James St., Buckingham Gate.

Original Proprietors.MATHER, THOMAS.

Of Brunswick Square. Possibly merchant of Thos. & John Mather, merchants, Mincing Lane.

MAUD, JAMES M.

Of Tower St. No information.

MAUD, WILLIAM.

Of Tower Hill. No information.

MAWMAN, JOSEPH, (c1764 - 1827)

Bookseller, Poultry.

MELLO, ABRAHAM.

Deputy governor of London Assurance Office.

MENET, J.F.

Merchant of Old Broad St. Director of London Assurance Office.

MILBURN, WILLIAM.

In service of E.I.C. Author of Oriental Commerce: or a Guide to the Trade of the East Indies and China, 1813.

MILLET, GEORGE.

Director of E.I.C., elected in 1805.

MILL, JOHN.

Of Hackney. No information.

MILLS, SAMUEL.

Merchant, of Finsbury Place.

MINET, J.L.

Merchant of Minet & Fector, Austin Friars.

MINSHULL, G.K. (?R)

Probably George Rowland Minshull, of Serjeant's Inn, special pleader for Home Circuit. E.I.C. stockholder.

Original Proprietors.MIESHULL, WILLIAM.

Of Bridge St. No information.

MOCATTA, DANIEL.

Merchant of Lemon St.

MOFFATT, THOMAS.

Member of firm of Moffatt & Brown, blue-makers, Goswell St.

MOLLING, F. jun.

Of Laurence Pountney Lane. No information.

MOORE, DANIEL(c1760 - 1828)

For many years, a solicitor in Lincoln's Inn. F.R.S., F.A.S., F.L.S., member of Royal Institution. Gave an interest-free loan of £1,000 to the R.I. when it was in financial difficulties and never claimed the money back.

MOORE, FRANCIS.

Chemical operator to the Society of Apothecaries.

MOORE, JOHN.

Of St. John's Square. No information.

MOORE, WILLIAM.

Goldsmith and jeweller of Ludgate St.

MORGAN, GEORGE.

Apothecary of Wellclose Square.

MORGAN, B.S.

Of Highbury. No information.

MORLAND, GEORGE.

Of Footscray. No information.

MORRIS, CHARLES.

Merchant of St. Mary Axe.

MORRISON, JAMES WILLIAM. (1774 - 1856)

In 1792 appointed clerk in Royal Mint and was deputy master and worker

Original Proprietors.MORRISON, JAMES WILLIAM (cont.)

between 1803 and 1851, when he was knighted.

MULLER, C.L.

Exchange and discount broker of 10, Winchester St.

MULLER, SAMUEL.

Notary public of 10, Winchester St.

MULLETT (or MULLET), THOMAS.

Merchant of Broad St. buildings.

MUNRO, GEORGE.

Merchant of Greenwich and E.I.C. stockholder.

MURDOCK, THOMAS.

Of Tavistock House, Tavistock Square. May possibly have conducted business as a merchant in Broad St. Place.

MURRAY, CHARLES.

Attorney of Bedford Row.

NASH, W.W.

Of Broad St. No information.

NEILSON, A.

Of Hunter St. No information.

NEWMAN, JAMES.

Of Savage Gardens. No information.

NEWMAN, GEORGE.

Of Newington Place. No information.

NEWMAN, HENRY.

Of Holborn. No information.

Original Proprietors.NEWMAN, JOHN.

Of Mansion House St. No information.

NICHOLS, JOHN F.A.S. (1745 - 1826)

Printer and author. Interested in history and antiquities. From 1792 until his death he was responsible for producing the Gentleman's Magazine and frequently wrote for it.

NICHOLSON, SAMUEL.

Warehouseman of Cateaton St.

NICHOLSON, THOMAS.

Insurance broker, Artillery Place.

NIGHTINGALE, THOMAS.

Warehouseman of Milk St.

NISBETT, THOMAS, jun.

Of Winchmore Hill. No information.

NIXON, RICHARD.

Merchant of Doughty St.

NOBLE, RICHARD.

Member of firm of Noble & Sampson, wine and hop merchants of St. Mary's Hill.

NORMAN, ROBERT.

Hatter, 40, Cannon St.

NORRIS, WILLIAM.

Surgeon of Old Jewry.

NORTON, Jer.

Of Lawrence Lane. No information.

NOYES, JOHN.

Of Grocer's Hall. No information.

Original Proprietors.OAKLEY, BENJAMIN.

Stockbroker.

ORME, COSMO. (1780 - 1859)

Bookseller. Partner in firm of Longman, Rees, Hurst & Orme, from which he retired in 1841. In 1837 he was the first president of the Booksellers' Provident Institution.

PACIFICO, EMANUEL.

Apothecary of Bury St.

PAGE, CHARLES.

Merchant, 79, Guilford St.

PALMER, GEORGE.

Insurance broker, Aldermanbury.

PALMER, JAMES.

Treasurer, Christ's Hospital.

PALMER, JAMES.

Hosiery warehouseman, Aldermanbury.

PALMER, NATHANIEL.

Address given as Aldermanbury, so could be connected with either James Palmer or George Palmer.

PALMER, THOMAS.

Attorney of Warnford Court. A Thomas Palmer is listed as a proprietor of the Royal Institution but there is no means of knowing whether it is the same person.

PARKER, SAMUEL.

Glass manufacturer of Parker & Perry, Fleet St.

PARKER, WILLIAM.

Possibly a glass manufacturer of that name who died in 1817, aged 84.

Original Proprietors.PARKES, SAMUEL. (1761 - 1825)

Chemist. Settled in London in 1803 as a manufacturing chemist. He published several manuals of chemistry between 1806 and 1815. His Chemical Catechism, written for his daughter was the best known and was translated into Russian. He also received a silver cup from the Scottish Horticultural Society for his paper on the uses of salt in gardening. A member of the Geological Society.

PARRY, HENRY.

Agent of Leadenhall St.

PEACOCK, J.H.

Of Bishopsgate St. No information.

PEARKES, JOHN.

Silk merchant of St. Paul's Church Yard.

PEARSALL, J.

Of Cheapside. No information.

PEARSON, J.

Address given as Rutland Wharf, so possibly John Pearson, coal merchant of that address.

PENNINGTON, JAMES. (1777 - 1862)

Writer on currency and banking. Engaged in business in London. In 1831 appointed by the president of the India board to investigate the accounts of the East India Company but the appointment was cancelled on a change of administration. In 1848 he published The Currency of the British Colonies, which was printed for official use.

PEPYS, H.W.

Of Artillery Place. Probably related to W.H. Pepys. Instrument maker.

PEPYS, WILLIAM HASLEDINE. (1775 - 1856)

His father was a cutler and maker of surgical instruments and W.H. Pepys extended the business to include scientific instrument making. He was a founder of the Askesian Society, an early member of the Mineralogical Society and a member of the Geological Society of which he became treasurer and later vice-president. He was elected F.R.S. in 1808. He was a member of the Royal Institution and was president in 1816. He designed the laboratory of the Finsbury Circus building. As a proprietor of the L.I. he was very

Original Proprietors.PEPYS, WILLIAM HASLEDINE (cont.)

active, being a manager for many years honorary secretary from 1821 to 1824 and vice president from 1843 until his death.

PERIGAL, F. jun.

Member of firm of Francis Perigal & Son, watchmakers.

PERRY, JAMES. (1756 - 1821)

Journalist. In 1789 he became editor and proprietor of the Morning Chronicle. He accumulated enough capital to set up a corn mill and calico factory which brought him considerable wealth. He was a brother-in-law of Porson.

PETT, SAMUEL, M.D. (d.1823)

Physician to the Life Dept. of the Albion Fire and Life Assurance Co.Ltd. He died from the effects of a dissection wound on 1 January 1823.

PETTITT, RICHARD.

Packer of 47, Watling St.

PHILLIPS, RICHARD. (1778 - 1851)

Chemist and druggist of Poultry. With his elder brother, William, William Allen and others, founded the Askesian Society. In 1817, appointed lecturer in chemistry at the London Hospital; he also lectured in chemistry at the Royal Military College, Sandhurst and at Granger's medical school, Southwark. He was elected F.R.S. in 1822. In 1841 he was offered the presidency of the Chemical Society but declined it, although he was president 1849 - 50. In 1839 he was appointed chemist and curator of the Museum of Practical Geology in Jermyn St., a post he held until his death. He wrote numerous papers on chemical subjects.

PHILLIPS, WILLIAM. (1773 - 1828)

Printer and publisher of George Yard, Lombard St. Did much of printing for L.I. in early years. Brother of above. He was one of the founder members of the Geological Society and became distinguished as a geologist. Author of several geological works.

PHILLIPS, WILLIAM.

Of Grosvenor Place. No information.

PIESCHELL, CHARLES.

Member of firm of Pieschell, Brogden & Co., Russia merchants,, of Size Lane. Proprietor of the Royal Institution.

Original Proprietors.PIGOU, FREDERICK.

Of Hill St. In 1776 a Frederick Pigou was a director of E.I.C. May be same man.

PILGRIM, CHARLES.

Address: Hampstead. Possibly connected with business of C. Pilgrim, merchant, Throgmorton Street.

PINCHBACK, WILLIAM.

Merchant, of Pinchback & Davies, Fenchurch St.

PISTOR, W.J.

Drug broker, of J. & W.J. Pistor, Walbrook.

PLUMER (or PLUMMER), JOHN.

Possibly merchant, of Plummer, Barham & Co., Philpot Lane.

PLUMER, THOMAS.

See above.

PLUMER, T.W.

See above.

PODMORE, ROBERT.

Address: Chingford. Possibly R. Podmore, broker, Crown Court, Threadneedle St.

POPE, MICHAEL.

Merchant of Jarman & Pope, Cannon St.

POPPELWELL, JOHN.

Tea broker of Popplewell & Styan, Scot's Yard.

POYNDER, THOMAS.

Member of firm of T. Poynder & Son, builders, of Bishopsgate St.

POYNDER, THOMAS, jun.

See above.

Original Proprietors.PRATT, Rev. JOSIAH, M.A., F.A.S. (1768 - 1844)

Of 19, Little Moorfields. Evangelical divine.

PRICE, Sir CHARLES, Bart. (1748 - 1818)

Alderman of City of London (ward of Farringdon Without.) M.P. for London, 1802 - 12. Created baronet, 1804.

PRICKETT, ROBERT.

Of Mansion House St. E.I.C. stockholder.

PRICKETT, WILLIAM.

Of Old South Sea House. No information.

PROCTOR, FRANCIS.

Of Gracechurch St. No information.

PRYOR, ROBERT.

Brewer, Shoreditch.

PUGH, JOHN.

Apothecary of Gracechurch St.

RAIKES, GEORGE.

Probably connected with firm of merchants of Broad St. E.I.C. agents. Director of E.I.C.

RAIKES, JOB MATTHEW.

Member of firm of merchants and E.I.C. agents of Broad St. Member of Hudson's Bay Co.

RAIKES, R.M.

Merchant and E.I.C. agent.

RAIKES, THOMAS.

Member of firm of merchants and E.I.C. agents, Broad St. A director of the Bank of England. In 1797 listed as a life subscriber of the Royal Institution.

Original Proprietors.RAINE, MATTHEW, D.D., F.R.S., F.A.S. (1760 - 1811)

Schoolmaster and divine. He was educated at Trinity College, Cambridge and in 1791 was appointed headmaster of Charterhouse, a post he held until his death. He was elected F.R.S. in 1803 and in 1809 was chosen preacher of Gray's Inn. He was a collector of classical books, which went to the library of Trinity College, Cambridge. A friend of Porson. Also a member of the Geological Society.

RAMSBOTHAM, JOHN.

Of Jermyn St. No information.

RAMSBOTTOM, JOHN (d.1845)

Member of firm of Ramsbottom and Beverstock, brewers, 74, Aldersgate St. M.P. for Windsor, 1810 - 1845.

RAMSBOTTOM, RICHARD, (c1750 - 1813)

Distiller of Ramsbottom & Turlington, 74, Aldersgate St. M.P. for Windsor, 1806 - 10.

RAMSDEN, THOMAS.

Surgeon of Warwick Lane.

RANDALL, RICHARD.

Blackwell Hall factor.

RANDALL, WILLIAM.

Of Whitehall. No information.

RANKIN, RICHARD.

Woollen draper of Change Alley.

RAVENHILL, JOHN.

Member of firm of Ravenhill & Oldham.

RAWLINS, Sir William.

Of Old Bethlem. No information.

REAY, JOHN.

Of Water Lane. No information.

Original Proprietors.REECE, WILLIAM.

Of St. Thomas Apostle. No information.

REES, OWEN. (1770 - 1837)

Bookseller and publisher, in 1794, taken into partnership by T.N. Longman.

REEVE (also REAVE or REEVES), JOSHUA.

Of Canterbury Square. Proprietor of the Royal Institution. Merchant.

REID, THOMAS (d.1824)

Member of firm of Reid, Irvin & Co., merchants of Broad St. Buildings.
A director of the E.I.C.

REMINGTON, WILLIAM.

Banker of firm of Stephenson, Batson, Remington & Smith, 60, Lombard St.

RENNIE, JOHN. (1761 - 1821)

Famous engineer. Accepted offer by James Watt to take charge of works at Albion Flour Mills, Blackfriars. Settled in London and about 1791 set up business as a mechanical engineer on his own account. Much concerned with canal, bridge and harbour construction. Elected F.R.S. in 1798. Proprietor of the Royal Institution.

REYNOLDS, JOSEPH.

Wine merchant of J. & W. Reynolds, Idol Lane.

REYNOLDS, J.F.

Of Carshalton. May be connected with above firm.

REYNOLDS, T.

Of Wallington. No information.

REYNOLDS, WILLIAM.

Wine merchant of J. & W. Reynolds, Idol Lane.

REYNOLDS, W.F.

Of Clapham. May be connected with above firm.

RHODES, THOMAS.

Merchant of Princes St., Lothbury.

Original Proprietors.RICARDO, DAVID (1772 - 1823)

Economist and city merchant. Interested in the scientific movements which grew up towards the end of the 18th century. Fitted up a laboratory and formed his own collection of minerals. One of the original members of the Geological Society, 1807.

RICARDO, MOSES.

Surgeon of Bow, Middlesex.

RICKARDS, JAMES.

Possibly a carpet manufacturer of Finsbury Square.

RICKARDS, THOMAS.

Of Gray's Inn Square. No information.

RICKMAN, JOSEPH, jun.

Of Craven St. No information.

RIDOUT, JOHN GIBBES.

Surgeon and apothecary, Paternoster Row. Member of the Geological Society.

RIGBY, T.T.

Solicitor, City Chambers.

RIPLEY, FREDERICK.

Member of firm of Ripley, Wiss & Co., brokers of Laurence Pountney Lane.

RIPLEY, H.

See above.

RIPLEY, J.R.

See above.

RIVAZ, V.F.

Possibly a printing error for T.F.Rivaz, a Portuguese merchant.

ROBARTS, ABRAHAM, M.P.(c1745 - 1816)

Banker and director of E.I.C. for City interests. M.P. for Worcester, 1796 - 1816.

Original Proprietors.ROBARTS, ABRAHAM WILDAY (c1780 - 1858)

Banker. Member of firm of Robarts, Curtis, Robarts & Curtis, 15, Lombard St. M.P. for Maidstone, 1818 - 37.

ROBERTS, JOHN. (d.1808)

Possibly deputy chairman of E.I.C., 1803.

ROBERTS, THOMAS.

Broker of Charterhouse Square.

ROBERTS, THOMAS, jun.

See above.

ROBERTS, JOSIAH.

Member of firm of T. Davy & J. Roberts, drug merchants of Gould Square.

ROBINSON, GEORGE.

Possibly secretary to the London Dock Co.

ROBINSON, ANTHONY (1762 - 1827)

Educated for the Baptist ministry. In 1796 he entered a business in London as a sugar-refiner. Made the acquaintance of Priestley and Rutt.

ROBINSON, JAMES.

Of City Chambers. No information.

ROBINSON, SAMUEL.

Of Grove Hill. No information.

ROGERS, CHARLES.

Linen draper, Cheapside.

ROGERS, HENRY.

Of Freeman's Court. No information.

ROGERS, JOHN.

Merchant and ship owner on E.I.C. business.

ROHDE, SAMUEL.

Of Limehouse. No information.

Original Proprietors.ROW, WILLIAM.

Broker, of Row, Newley & Row, St. Thomas Apostle.

ROW, WILLIAM, jun.

See above.

ROWCROFT, THOMAS (d.1824)

Alderman, Walbrook Ward, 1802 - 8. Later, British Consul in Peru.
Proprietor of the Royal Institution.

RUTT, JOHN TOWILL (1760 - 1841)

Politician and man of letters. Joined his father's business as a
wholesale drug merchant. A close friend of Priestley - helped him after
the Birmingham riots.

St. BARBE, JOHN.

Ship and insurance broker of St. Barbe, Green & Bignell, Seething Lane.

St. LEU, CHARLES de, jun.

Of Spital Square. No information.

SALTE, WILLIAM.

Member of firm of W. & G. Salte, linen drapers, Poultry.

SALTE, WILLIAM GEARY.

See above.

SALTER, JOHN J.

Of Shenfield. No information.

SAMUDA, D.

Merchant.

SANSOM, PHILIP

Merchant of Finsbury Square.

SAUNDERS, JAMES.

Fish factor of Hand Court.

Original Proprietors.SAUNDERS, THOMAS.

Assistant tea and drugs warehousekeeper, E.I.C.

SAUNDERS, WILLIAM, M.D., F.R.S., F.A.S. (1743 - 1817)

Educated at Edinburgh University. In 1770 he was elected physician to Guy's Hospital and in 1790 became a Fellow of the College of Physicians. Physician-in-ordinary to H.R.H. the Prince of Wales. F.R.S. A proprietor of the Royal Institution.

SAVILL, EDWIN.

Of Minories. No information.

SAVILL, THOMAS.

Of Coleman St. No information.

SAVILL, WILLIAM.

Of Minories. No information.

SCHOLEY, GEORGE (d.1839)

Merchant and distiller of Old Swan. Alderman, Dowgate Ward, 1805 - 39.

SCOTT, JOHN.

Of Kennington. No information.

SETREE, HENRY.

Solicitor of Great St. Helen's.

SEWARD, HENRY HAKE (c1778 - 1848)

Architect. Pupil of Sir John Soane and remained in his office after the expiration of his articles. In 1808 he became district surveyor of St. Martin-in-the-Fields and St Anne, Soho. In 1810 he entered into partnership with George Byfield and in the same year became clerk of works at Greenwich Hospital and surveyor to the Hospital in 1821.

SHARP, GEORGE.

Member of firm of G. Sharp & Son, Russia brokers, Threadneedle St.

SHARP, RICHARD, F.R.S., F.A.S., M.P. (1759 - 1835)

Known as 'Conservation Sharp'. He was for many years a partner in the West India House of Boddington, Sharp & Phillips. Throughout his life he took a keen interest in politics and literature. In his early years he

Original Proprietors.SHARP, RICHARD (cont.)

knew Johnson and Burke. He was one of the original members of the Literary Society, founded in 1806. From 1806 to 1812 he sat in parliament as a Whig for the pocket borough of Castle Rising in Norfolk. At a bye-election in March, 1816 he was returned for the Irish constituency of Portarlinton and was re-elected at the general election in 1818 but resigned early in 1819. He was returned for Ilchester at the general election of 1826 but, by an order of the House of Commons on 22 February 1827, his name was erased from the list.

SHARP, (or SHARPE), RICHARD.

Notary, Fenchurch St.

SHARP, WILLIAM.

Wholesale hosier, Leadenhall St.

SHARPE, LAUNCELOT (d. 1810)

Member of firm of L. Sharpe & Sons, tea dealers and grocers, Fenchurch St.

SHARPE, R.S.

See above.

SHARWOOD, SAMUEL.

Leather cutter.

SHAW, BENJAMIN

Chairman of Lloyd's, 1824 - 6. Shared, with John Smith and Isaac Goldsmid, the risk in connection with the acquisition of the Gower St. site for University College in 1825.

SHAW, BENJAMIN, jun.

Merchant, of London Bridge.

SHAW, EDWARD.

Of Guilford St. No information.

SHAW, JAMES, M.P.

At age 17 went to New York and joined the firm of George and Samuel Douglass, merchants, and three years later, returned to Britain as a junior member of the firm in London. In 1798 he became alderman for the ward of Portsoken; in 1805 he was Sheriff of London and Middlesex and Lord Mayor of

Original Proprietors.SHAW, JAMES (cont.)

London in 1805. He was M.P. for London, 1806 - 18, and was created a baronet in 1809. From 1831 to 1843 he was Chamberlain of London.

SHAW, JOHN (1776 - 1832)

Architect to Christ's Hospital.

SHAW, JAMES.

Warehouseman of King St.

SHAW, ROBERT.

Of New Bridge St. No information.

SHAW, SAMUEL.

Of Brunswick Square. No information.

SHEARMAN, THOMAS.

Attorney of Doughty St.

SHEE, JOSEPH.

Merchant, of Joseph & Thomas Shee, Copthall Court.

SHEE, THOMAS.

See above.

SHEPHERD, WILLIAM.

Address: Russell Square. Possibly stockbroker of Throgmorton St.

SHEPLEY, HUGH.

Merchant of Horsley Down.

SHEPLEY, MICHAEL.

Member of firm of George Shepley & Son, oil mills, seed crushers and leather dressers of Carshalton.

SHEPPARD, THOMAS.

Blackwell Hall factor.

SHUTTLEWORTH, GEORGE.

Auctioneer of Austin Friars.

Original Proprietors.SIKES, WILLIAM.

Banker of Sikes, Snaith & Co., Mansion House St.

SIMS, WILLIAM, jun.

Of Mile End. No information.

SKEY, JOSEPH, M.D. (c1773 - 1866)

Educated at Edinburgh. Licentiate of the College of Physicians, 1803.
Physician to the forces and inspector-general of army hospitals.

SLACK, THOMAS.

Of 20, Bloomsbury Square. No information.

SLACK, THOMAS C.

See above.

SLARK, WILLIAM.

Block-tin manufacturer of Cheapside.

SMITH, CHRISTOPHER (d.1835)

Draper. Alderman for Cordwainer Ward in 1807. Later served as Sheriff, City of London.

SMITH, EDWARD GROSE.

Attorney. Clerk to H.M. Court of Lieutenancy of the City of London and Clerk of Barbers' and Bakers' Companies.

SMITH, GEORGE, M.P. (1765 - 1836)

Banker of Smith, Payne & Smith, George St. A director of E.I.C.

SMITH, HASKETT.

Insurance broker of Smith, St. Barbe & Martin, 9, America Square.

SMITH, JOHN, M.P.

Banker.

SMITH, JOSEPH.

Of Mark Lane. No information.

SMITH, JOSHUA JONATHAN.

Pattenmaker. Alderman, Castle Baynard Ward, 1803 - 31.

Original Proprietors.SMITH, ROBERT.

Wine merchant, of Smith, Jennings & Smith, St. Paul's Church Yard.

SMITH, WILLIAM EDWARD.

Goldsmith and jeweller of Poultry.

SOLOMONS, PETER.

Of Prescott St. No information.

SORET, JAMES.

Address: Hackney. Of James Soret & Co., sworn brokers, Tom's Coffee House, Cornhill.

STAINFORTH, RICHARD.

Address: Clapham. Possibly of Stainforth & Gibberne, wine merchants.

STEELE, JOSEPH.

Surgeon of Tower Hill. E.I.C. stockholder.

STEELE, ISAAC.

Of Surrey Square. No information.

STEPHENS, JOHN.

Of Cannon St. No information.

STERRY, ANTHONY.

Possibly oil and colourman.

STERRY, HENRY.

Of Basinghall St. No information.

STEVENS, H.

Of Wapping. No information.

STEVENS, ROBERT.

Of Hackney Terrace. Secretary of L.I., 1812 - 21.

STEVENS, WILLIAM.

Attorney, Old Jewry.

Original Proprietors.STEVENSON, JOSEPH.

Grocer of Botolph Lane.

STOCKWELL, JOHN.

East India Company tea and drug warehousekeeper.

STRATTON, SAMUEL.

Russia merchant of Gt St. Helen's.

STOUT, JOHN.

Of Lancaster. No information.

STYAN, THOMAS.

Of Styan, Son & Bishop, tea brokers, Scot's Yard.

SUTTON, ROBERT.

Of Artillery Place. No information.

SWAIN, THOMAS.

Attorney, Old Jewry.

SWAINE, EDWARD.

Merchant of Basinghall St.

SWIFT, JOHN.

Hosier of Fenchurch St.

TABOR, ROBERT.

Of Friday St. No information.

TADDY, JAMES.

Tobacconist of Fenchurch St.

TAVERNER, JOHN.

Wholesale tea dealer of Taverner & Appleton, Lombard St.

TAYLOR, J.V.

Of Southgate, No information.

Original Proprietors.TAYLOR, ROBERT.

Someone of the same name is listed in 1799 as a life subscriber of the Royal Institution.

TAYLOR, THOMAS.

Warehouseman of Friday St.

TAYLOR, WILLIAM.

William Taylor (1756 - 1836), man of letters and literary critic, was a proprietor of the Royal Institution though there is nothing to say whether he is the same person.

TENANT, GEORGE.

Of Billiter Square, No information.

TERRY, EDWARD.

Of Clapham. No information.

TERRY, J.E.

Of Clapham. No information.

TERRY, THOMAS.

Of John's Coffee House. No information.

THELUSSON, CHARLES, M.P.(1770 - 1815)

M.P. for Evesham, 1796 - 1806.

THIRLWALL, Rev. THOMAS(d.1827)

Held small business in London until 1814 when he became rector of Bower's Gifford, Essex.

THOMAS, P.W.

Of Highbury. No information.

THOMAS, REES GORING.

Merchant of Tavistock Place.

THOMAS, WILLIAM.

Merchant of Queen St.

Original Proprietors.THOMSON, J.S.

Of Kennington. No information.

THOMPSON, JOHN.

Rope maker, Shadwell.

THOMPSON, WILLIAM.

Of Laurence Pountney Lane. No information.

THORLEY, ROBERT.

Merchant of Coleman St. Buildings.

THORNTON, HENRY, M.P. (1760 - 1815)

Philanthropist and economist. In 1784 joined the firm of Down, Free and Thornton, bankers, and was active in it until his death. Held Whig principles but did not join either party. He was a close friend of Wilberforce and supported the anti-slavery campaign. He was the first treasurer of the Society for Missions to Africa and the East (later the Church Missionary Society) and also the first treasurer of the British and Foreign Bible Society. Director of E.I.C. Proprietor of the Royal Institution.

THORNTHWAITE, THOMAS.

Of Limehouse. No information.

THORP, SAMUEL (c1737 - 1822)

Warehouseman and wholesale linen draper, Aldgate.

TICKELL, JOSEPH.

Brewer of Whitechapel.

TICKELL, JOHN.

Of Bread St. No information.

TILL, HENRY.

Broker of Throgmorton St.

TILLOCK (or TILLOCH) A.

Of Carey St. May be Alexander Tillock, who was a founder member of the Mineralogical Society, and Editor of the first "Philosophical Magazine".

Original Proprietors.TOMKINS, BENJAMIN.

Malt factor, of Thames St.

TOMLINSON, GEORGE.

Attorney, Warnford Court.

TOULMIN, JOSEPH.

Surgeon from Hackney.

TOWERS, Rev. J.L.

Of Lamb's Conduit St. No information.

TOWGOOD, JOHN.

Banker, Clement's Lane.

TOWGOOD, WILLIAM.

Sugar refiner of Towgood, Danvers & Co., Bread St. Hill.

TOWNSEND, WILLIAM.

Wholesale jeweller, Newgate.St.

TOWSE, J.D.

Attorney, Fishmongers' Hall.

TRAVERS, BENJAMIN.

Either: Benjamin Travers (1752 - 1817) sugar refiner of Queen St.

Or: Benjamin Travers (1783 - 1858) son of above. Surgeon. Worked in father's firm but disliked it and became apprenticed to Astley Cooper in 1800. He became a member of the College of Surgeons in 1806 and the following year was appointed demonstrator of anatomy at Guy's Hospital. In 1810 he became surgeon at the London Infirmary for Eye Diseases (Moorfields Ophthalmic Hospital). He was elected F.R.S. in 1813 and in 1815 was surgeon to St. Thomas's Hospital. He was president of the Royal Medical and Chirurgical Society in 1827 besides holding many important offices in the College of Surgeons. He was the first hospital surgeon in England to specialise in eye surgery.

TRAVERS, JOSEPH.

Wholesale grocer in Swithin's Lane.

TREACHER, JOHN, jun.

Member of firm of Treacher & Co., tallow melters and oilmen, Paternoster Row.

Original Proprietors.TROWER, HUTCHES.

Stockbroker of John and Hutches Trower, Bank St., Cornhill. Member of the Geological Society.

TROWER, JOHN.

See above.

TUFFEN, (or TUFFIN) JOHN FURNALL (d.1820)

Wine and spirit merchant and later a banker. Friend of James Watt.

TURING, JOHN.

Merchant of Devonshire Place.

TURNER, CHARLES HAMPDEN.

Merchant of Limehouse,

TURNER, W.S.

Of Bow. No information.

UPTON, JAMES.

Apothecary of J & C. Upton, Cheapside.

VALENTINE, J.H.

Of Old Bethlem. No information.

VANDERCOM, JOSEPH FITZWILLIAM.

Attorney of 25 Bush Lane. Solicitor to the London Institution. In 1799 listed as a life subscriber of the Royal Institution. Also a member of the Medico-Botanical Society of London, and of the Geological Society.

VAUGHAN, WILLIAM. (1752 - 1850)

Merchant and author. In 1783 he became a director of the Royal Exchange Assurance Co. and continued as director, sub-governor and governor until 1829. In 1791 he formed a society to promote the construction of canals but it failed and so he turned his attention to docks. Between 1793 and 1797 he produced a series of pamphlets and tracts advocating the construction of docks for the Port of London. The development of London as a port owed much to his exertions. F.R.S., F.L.S., F.R.A.S. In 1799 he was listed as a life subscriber of the Royal Institution.

Original Proprietors.VAUX, EDWARD.

Merchant and insurance broker.

VAUX, GEORGE.

Surgeon.

VAUX, JASPER.

Member of Lloyd's committee.

VENN, EDWARD.

Tea broker, of Venn, Wright & Venn, Bow Lane.

VINE, JAMES.

Of Size Lane. No information.

VOWLER, WILLIAM.

Wholesale draper of King St.

WAKEFIELD, FRANCIS.

Merchant of Broad St.

WALKER, JOHN (1759 - 1830)

In 1793 he journeyed through England and Ireland with the aim of preparing a 'Universal Gazetteer' which was published in 1795. After settling in London he entered Guy's Hospital as a pupil and in 1799 received the degree of M.D. at Leyden. He became a licentiate of the College of Physicians in 1812. He was a supporter of vaccination.

WALKER, RALPH.

Civil engineer, East India Docks, Blackwall.

WALL, CHARLES.

Merchant of 9, Bishopsgate St.

WALSH, BENJAMIN.

M.P. for Wootton Bassett, 1808 - 12.

WANSEY, WILLIAM.

Drysalter of W. & J. Wansey, 38 Upper Thames St.

Original Proprietors.WARBURTON,

Of Hackney. Possibly Henry Warburton (M.P., later F.R.S.). Member of Geological Society.

WARD, JOHN.

Of Ludgate Hill. No information.

WARD, SETH STEPHEN.

Packer of Billiter Lane.

WARE, JAMES (1756 - 1815)

Surgeon. In 1778 he entered into partnership with Jonathan Waltham, a surgeon who specialised in ophthalmic surgery. In 1802 he was elected F.R.S.

WARREN, JOHN.

Of Canonbury. Possibly a captain in the service of the E.I.C. who published an account of experiments he had made on chronometers at Madras. A proprietor of the Royal Institution.

WARRE, THOMAS.

Of Stratford Place. Probably connected with firm of Warre (Bros.) merchants of Stratford Place.

WATSON, JOSHUA (1771 - 1855)

Philanthropist. In 1786 he was employed in his father's counting house in Mincing Lane and was admitted as a partner in 1792. He was interested in church work and was a founder member and treasurer of the 'National Society' for the education of the poor. He retired from business in 1814 and occupied himself with charitable works. He was a member of the S.P.C.K. and treasurer of the Clergy Orphan Society. In 1820 he received the honorary degree of D.C.L. at Oxford and in 1828 took a leading part in the foundation of King's College, London.

WATSON, WOOD W.

Of Dulwich. No information.

WATT, JAMES (1736 - 1819)

Famous engineer and industrialist of Birmingham. Not active in the Institution.

WATTS, DAVID PIKE.

Wine merchant of Gower St. Philanthropist. Proprietor of the Royal Institution.

Original Proprietors.WAYMOUTH, C.B.

Of South St., Finsbury. No information.

WAYMOUTH, FREDERICK.

Of South St., Finsbury. Sugar refiner of same name in Wellclose Sq.

WAYMOUTH, HENRY.

Of Battersea. No information.

WEDDELL, SAMUEL.

Woollen draper of Weddell & Till, Aldgate.

WELLS, R.S.

Merchant. In 1799 Richard Strong Wells was listed as an annual subscriber of the Royal Institution.

WELSFORD, SAMUEL.

Of Southampton St. No information.

WELSFORD, J.C.

As above.

WERE, ROBERT.

Seed crusher and white lead maker, Garrett Lane, Wandsworth.

WESTLEY, JOHN.

Of Trinity Lane. No information.

WESTON, AMBROSE.

Attorney of A. & J. Weston, Fenchurch St.

WESTON, JAMES.

As above.

WESTON, JOHN.

Surgeon of Shoreditch.

WETHERHEAD, THOMAS.

Cooper of Thomas Wetherhead & Son, Wapping.

Original Proprietors.WETHERHEAD, T.T.

See above.

WHEELER, WILLIAM.

Apothecary of Ludgate St.

WHITE, SAMUEL.

Of Surrey Square. No information.

WIGRAM, H.L.

Member of Sir Robert Wigram's family and presumably, therefore, a member of the family firm. Merchant and E.I.C. agent.

WIGRAM, JAMES (1793 - 1866)

Third son of Sir Robert Wigram. Educated at Trinity College, Cambridge, called to the bar in 1819. Took silk in 1834. In 1842 he was a member of the judicial committee of the privy council and was knighted.

WIGRAM, JOHN.

See: Sir Robert Wigram.

WIGRAM, MONEY (1790 - 1873)

Merchant and ship owner in City of London. Director of the Bank of England, 1823 - 37.

WIGRAM, OCTAVIUS (1794 - 1878)

See: Sir Robert Wigram.

WIGRAM, Sir ROBERT, Bart. (1744 - 1830)

Head of firm of Wigram, Holder & Wigram, merchants and E.I.C. agents. Had very large family (22 children).

WIGRAM, ROBERT, jun. F.A.S.

Member of firm of Wigram, Holder & Wigram.

WIGRAM, WILLIAM (1780 - 1858)

Merchant. A director of the E.I.C. for the shipping interest.

WILBY, THOMAS.

Receiver of Christ's Hospital.

Original Proprietors.WILDMAN, HENRY.

Merchant.

WIKINSON, JOHN, M.D.

Physician of Southampton Row.

WILKINSON, JAMES.

Of King St. No information.

WILLIAMS, ALLEN.

Apothecary, of Southwark.

WILLIAMS, JAMES.

Merchant and E.I.C. agent of City Chambers.

WILLIAMS, MARSHALL.

Of Lombard St. No information.

WILLIAMS, SAMUEL.

America merchant, Finsbury Square.

WILLIAMS, WILLIAM.

Of Clifford's Inn. Possibly an early member of the Geological Society.

WILLIS, ARTHUR.

Of King St. No information.

WILSON, JOSEPH.

Of Milk St. No information.

WILSON, JOSEPH.

Of Highbury. No information.

WILSON, ROBERT.

Merchant in Friday St.

WILSON, WILLIAM, Jun.

Weaver and mercer of Minorities.

Original Proprietors.WINDLE, THOMAS.

Of John St. No information.

WINTER, JOHN, jun.

Solicitor to the Bank.

WISS, JOHN ANTHONY.

Broker of Laurence Pountney Lane.

WISS, MATTHEW.

Of Broad St. Buildings, No information.

WISS, ROBERT.

Of Broad St. Buildings. No information.

WOOD, GEORGE.

Of Broad St. Buildings. Member of firm of Wood & Cornish, merchants and agents to the Associated Tanners of Cornwall and to the Cornish Copper Co.

WOOD, L.W.

Of Tooley St. No information.

WOODS, HENRY.

Of Chertsey. No information.

WOODS, JOSEPH (1776 - 1864)

Architect and botanist. Not very successful as an architect so devoted his attention to geology and botany. He contributed to the Linnean 'Transactions'. F.L.S., F.G.S., F.S.A. An early member of the Askesian Society. Later became a member of the Geological Society.

WOODS, SAMUEL.

Woollen draper of 8, George Yard, Lombard St. The first secretary of the L.I. Also an early president of the Askesian Society. Later he became a member of the Geological Society.

WOODBIDGE, JAMES, jun.

Of Richmond. No information.

WOODWARD, JOHN.

Merchant of Mark Lane.

Original Proprietors.WOOLASTON, G.H.

Of Clapham. Possibly connected with the Hudson Bay Co.

WRIGHT, CHARLES.

Tobacconist of Old Jewry.

WYNCH, P.B.

No information.

WYNCH, P.M.

No information.

YELLOLY, JOHN (1774 - 1842)

Educated at Edinburgh, graduated M.D. there in 1799. Settled in London in 1800 and in 1807 became physician to the London Hospital, until 1818. In 1805, with Alexander Marcet, he was one of the originators of the Royal Medical and Chirurgical Society. He read seven papers before this society, including two on a paralysis due to tumour of the brain and on loss of feeling without accompanying loss of power of movement. He was elected F.R.S. and published in Phil Trans for 1829 Remarks on the Tendency to Calculous Diseases. He published a further work on the same subject in 1830 and a pamphlet on Arrangements connected with the Medical Relief of the Poor, in 1837. A member of the Geological Society.

YOUNG, ROBERT.

Glass cutter of Young, Brown & Co., Watling St.

YOUNG, JAMES.

Of Hackney. No information.

YOUNG, JAMES.

Probably connected with Imperial Assurance Co.

2) Proprietors elected by the temporary committee of managers.BANKS, Sir JosephBIRKBECK, George.

BOGLE-FRENCH, NATHANIEL.

Member of Bogle-French, Burrows & Canning, merchants of 57, Old Broad St. A director of the Bank of England, 1796 - 1807. E.I.C. stockholder.

BOYDELL, JOSIAH (1752 - 1817)

Painter and engraver. Studied under Benjamin West and Richard Earlom and exhibited at the Royal Academy between 1772 and 1799. He was Master of the Stationers' Company and succeeded his uncle (John Boydell, d.1804) as alderman of Cheap Ward but resigned in 1809 because of ill-health.

BUTLER, CHARLES.BUXTON, ISAAC (d.1825)

Trained as a dissenting minister, but later turned to medicine. Became L.C.P. in 1805 and from 1807 until 1822 was physician to the London Hospital. He was the original proposer and was regarded as the founder of the Infirmary for Asthma and Consumption.

CHAMPION, ALEXANDER.

No information, although may be connected with Thomas Champion, vinegar merchant who was already proprietor of the Institution.

CLARK, Rev. ADAM.

No information.

COOKE, Rev. EDWARD.

No information.

FISHER, Rev. Dr. PHILIP (c1751 - 1842)

Master of Charterhouse, 1803 - 1842.

FORSTER, THOMPSON.

Master of Surgeons' Company.

FRANK (or FRANCK), JAMES? M.D. (d.1843)

Became Fellow of the College of Physicians in 1803 and was Gulstonian lecturer in 1804 and Censor in 1805. He was an army physician and at the time of his death was an inspector-general of army hospitals. One of the founders of the Geological Society.

FRASER, SIMON, M.P. (d.1807)

Merchant of 3 King's Arms Yard, Coleman St. Director of E.I.C. M.P. for Inverness-shire, 1796 - 1802 and supported E.I.C. and shipping interests.

FREND, WILLIAM (1757 - 1841)

Reformer and scientific writer. Educated at Christ's College, Cambridge, took Holy Orders and, in 1787 was converted to Unitarianism. In 1793 he had a violent quarrel with the University over religious matters and moved to London. In 1806 he was active in the formation of the Rock Life Assurance Co., and was appointed actuary, a post which he held until 1826, when he resigned through illness. He had been a pupil of Paley and Malthus was among his own pupils.

FRIDAG, SEBASTIAN.

Prussian Consul.

GLYNN, RICHARD CARR, Bt. (1755 - 1838)

Partner in banking firm of Hallifax, Mills, Glynn & Mitton, of Birchin Lane and Lombard St. He was knighted in 1790 and created a baronet in 1800. He was alderman for Bishopsgate, 1790 - 1829 and for Bridge Ward Without, 1829 - 1835. He served as Lord Mayor for London, 1798 - 9. E.I.C. stockholder

GOOD, JOHN MASON. (1764 - 1827)

Physician and miscellaneous writer. Settled in London in 1793, became a member of the College of Surgeons. In 1795 he won a prize offered by Dr. Lettsom, for an essay on Diseases frequent in Workhouses, their Cure and Prevention. He was an active member of the General Pharmaceutical Association which aimed to improve the education of druggists. He was elected F.R.S. in 1808. During 1811 - 12 he gave three courses of lectures at the Surrey Institution, which were published as The Book of Nature, in three volumes. In 1820 he obtained the degree of M.D. from Marischall College, Aberdeen and devoted himself to practise as a physician.

HUTTON, Rev. HENRY, M.A. (c1750 - 1833)

In 1793 he was appointed chaplain to Guy's Hospital and became rector of Beaumont, Essex in 1805.

KING, THOMAS.

Merchant of 3, Winchester St.

LAIRD, (or LAYARD), JAMES, M.D. (d. c1840)

Educated at Edinburgh M.D. in 1803, L.C.P. in 1806. From 1813 to 1824 he was physician to Guy's Hospital. Interested in mineralogy and active in the foundation of the Geological Society.

LESLIE, Hon. JOHN MELVILLE.

No information.

LONG, SAMUEL (d. 1807)

Probably of Samuel & Beeston Long, merchants of Leadenhall St.

MAITLAND, JOHN (c1754 - 1831)

Of Loughton Hall in Lincolnshire. M.P. for Chippenham, 1802 - 12 and 1817 - 18.

MARCEY, ALEXANDER JOHN GASPARD, M.D. (1770 - 1822)

Physician, born in Geneva, trained in Edinburgh, he received his M.D. in 1797, his L.C.P. in 1799 and at about the same time was appointed physician to the City Dispensary. He was appointed physician to Guy's Hospital in 1804 and in 1809 was put in charge of the temporary military hospital at Portsmouth after which, he returned to London and Guy's Hospital. He was interested in chemical and medical research. F.R.S., F.G.S. Proprietor of the Royal Institution.

NEAVE, Sir RICHARD, Bart.

Member of firm of Sir Richard & Thomas Neave, merchants of 9, New Broad St.

RAPER, MATTHEW (1742 - 1827)

Elected F.R.S. in March, 1783. He was director and afterwards vice-president of the Society of Antiquaries.

REES, Rev. ABRAHAM (1743 - 1825)

Encyclopaedist. Held tutorships at Coward's Academy and Hackney College as well as assistantships at nonconformist churches. In 1783 he was appointed pastor of the Old Jewry congregation, a post he held until his death. In 1778 he re-edited the 'Cyclopaedia' of Ephraim Chambers and reissued it between 1781 and 1786 with a supplement and much new material. He also produced a 'New Cyclopaedia' in 45 volumes which came out at regular intervals between 1802 and 1820. F.R.S., F.L.S.

SIMS, JAMES M.D. (1741 - 1820)

He had a successful practice in London and was physician to the General Dispensary. He was one of the founders of the London Medical Society and was president for many years.

STEVENS, RICHARD JOHN SAMUEL (1757 - 1837)

Musician. In 1796 he was appointed organist of Charterhouse and in 1801 became Gresham professor of music. He held both posts until his death. He was also the organist of the Temple Church from 1786. He was a member of the Royal Society of Musicians for 20 years and edited a collection of sacred music as well as writing a large number of glees.

TYRREL, THOMAS.

Possibly T. Tyrrel, attorney, Remembrancer's Office, Guildhall Yard.

PATTISON, JAMES.

Possibly merchant, of N. & J. Pattison, Old Jewry. Director of E.I.C.

PRINSEP, JOHN (c1746 - 1831)

Possibly merchant of Prinsep, Saunders & Co., Leadenhall St. Alderman, Lime St. Ward, 1805 - 9. M.P. for Queenborough, 1802 - 6.

RAY, ROBERT.

No information.

SMITH, HENRY.

Director of Bank of England.

SLADE, ROBERT.

Of Robert and William Slade, proctors and notaries.

STUART, JOHN (1744 - 1814) 1st Marquis of Bute.

M.P. for Bossiney, 1766 - 76, 1794 - 1814. Created Marquis of Bute in 1796. Elected F.R.S. in 1799. A trustee of the British Museum from 1800 until his death.

WHITFIELD, Rev. Dr.

No information.

WOOLASTON, Rev. F.J. HYDE.

No information.

BANKS, Sir JOSEPH, (1743 - 1820)

President of the Royal Society for 42 years. Botanist. Played a part in the foundation of the Royal Institution as some of the early meetings were held at his house and he was a V.P. He had no part in the formation or activities of the L.I. and, indeed was doubtful as to its value.

BIRBECK, GEORGE (1776 - 1841)

Active in the foundation of the Mechanics' Institutes. At the age of 23 he became professor of Natural Philosophy at Anderson's College, Glasgow and in 1800 established courses for workers at a low fee, which eventually developed into the Glasgow Mechanic's Institute. In 1804 he moved to London and established himself as a physician. He played a leading part in the foundation of the London Mechanics' Institute, was elected its president and delivered the opening address on 20 February 1834. He was closely associated with Brougham in this enterprise, both of them being among the first trustees. He was also active in the foundation of University College, London and was one of the first members of its council. He took an active part in the running of the L.I., giving many lectures without fee, serving as a manager and a vice-president and sitting on several committees, especially those concerned with apparatus, the running of the laboratory and the lectures.

BUTLER, CHARLES (1750 - 1832)

Standing Counsel of the Institution. Catholic and legal writer. In 1775 he set up in Lincoln's Inn as a conveyancer - at this period, a Roman Catholic could not be called to the bar or hold any official position. He was called to the bar in 1791, the first R.C. barrister since 1688, and took silk in 1831, again, the first Catholic to do so. He was much concerned with the legal disabilities of Roman Catholics. The author of numerous legal writings.

PORSON, RICHARD. (1759 - 1808)

Classical scholar. Librarian of L.I., 1806 - 8.

Note:

James Shaw. Lord Mayor of London, 1805, and James Ware, F.R.S., are listed with the original proprietors, taken from the printed list following the Plans and Bye-Laws of the London Institution, 1806, although from the minutes of the temporary committee of managers they were elected, along with 12 others, to be proprietors on 7 January 1806.

Appendix II

Analysis of original and elected proprietors.

	Trade & Commerce	Physicians & Surgeons Apothecary	Scientific Interests Occupation	R.I. propriet- or & subscrib- er	Clergy	Not Classi- fied & No infor- mation.	Lawyer.
Ackland, G.	x						
Addington, J.		x					
Addison, J.	x						
Agnew, W.						x	
Aikin, A.			x				
Aldebert, J.						x	
Alers, W.	x						
Allan, G.	x						
Allen, R.	x						
Allen, W.			x				
Amos, A.							x
Amos, J, jun.	x						
Amos, J, jun.						x	
Anderdon, J.	x						
Andrews, J. G.		x					
Andrews, M.						x	
Andrews, T.							x
Andrews, T.	x						
Andrews, W.	x						
Angerstein, J.						x	
Angerstein, J. J.	x			x			
Ansley, J.	x						
Arch, A.	x		x				
Armiger, T.		x					
Arthur, J.	x						
Aston, T.	x						
Atcheson, N.	x			x			
Atkins, A.	x						
Atkins, J.	x						
Atkins, J, jun.	x						
Atkinson, T.	x						
Aubert, A.	x		x				
Aubert, N.	x						
Babington, W.		x	x				
Bacon, H.						x	
Baily, F.	x		x				
Baily, H.						x	
Baker, J.						x	
Baker, R.						x	
Ball, J.	x						
Banbury, W.	x						
Banks, J.			x	x			
Barclay, R.	x						
Baring, A.	x						
Baring, F.	x			x			
Baring, H.	x						
Baring, T.						x	
Barnard, B.	x						
Barnard, J.	x						
Barnard, W.						x	

	Trade & Commerce	Physicians & Surgeons Apothecary	Scientific Interests Occupation	R.I. proprietor & subscriber	Clergy	Not Classified & No information.	Lawyer.
Barnes, G.	x						
Barnes, J.						x	
Barnes, R.						x	
Barnouin, H.						x	
Barr, J.						x	
Barrett, J.					x		
Bassevi, G.						x	
Battye, J.	x						
Bayford, J.							x
Bayley, D.						x	
Beale, D.						x	
Beazley, C.					x	x	
Beddome, J.	x						
Bedwell, J.	x						
Bell, C.		x	x				
Bell, H.	x						
Bell, J.	x						
Bell, J. jun.	x						
Belsham, T.					x		
Bennett, J.						x	
Bennett, T.	x						
Benson, J.						x	
Bentley, J.						x	
Berthon, P.	x						
Bevans, J.	x						
Bevington, R.	x						
Bevington, S.	x						
Bevington, T.	x						
Bingley, R.			x	x			
Binmer, J.	x						
Birch, N.		x					
Birkbeck, G.		x	x				
Birkbeck, W.	x						
Birkett, D.	x						
Bish, T.	x						
Black, A.	x						
Black, J.	x						
Blades, J.	x						
Blake, P.							x
Blakes, J.	x						
Blakesley, J.						x	
Bland, R.						x	
Blegborough, H.		x					
Blizard, T.		x					
Blizard, W.		x	x				
Blunt, T.			x				
Boddington, S.	x		x	x			
Boddington, T.	x			x			
Boddington, T. jun.	x						
Bodley, G.	x						
Bodley, T.	x						
Bodley, W.	x						

	Trade & Commerce	Physicians & Surgeons	Scientific Interests or Occupations	R.I. proprietors or subscribers	Clergy	Not Classified & No information	Lawyer
Bogle-French, N.	x						
Bolland, J.	x						
Bonar, T.	x			x			
Borradaile, A.	x						
Borradaile, C.	x						
Borradaile, J.	x						
Borradaile, R.	x						
Borradaile, W.	x						
Borradaile, W, jun.	x						
Bosanquet, S	x						
Boulderson, J.						x	
Boulton, M.			x	x			
Bourn, T.			x				
Bowden, J.						x	
Bowden, T.	x						
Bowers, N.	x						
Bowman, W.	x						
Boyd, E.						x	
Boydell, J.						x	
Bradney, J.						x	
Bradshaw, E.			x				
Brandon, I.	x						
Brandon, M.	x						
Brant, R.						x	
Bray, J.	x						
Bray, W.	x						
Brickwood, J.	x						
Brickwood, N.	x						
Bridges, G.						x	
Bridges, J.						x	
Bridges, T.	x						
Briggs, E.	x						
Briggs, W.							x
Britton, J.				x			
Brock, W.	x						
Brockhurst, J.						x	
Brogden, H.	x						
Brook, C.	x						
Brooks, S.	x						
Brough, A.	x						
Brown, B.	x						
Brown, G.						x	
Brown, R.	x						
Browne, E.						x	
Browning, W.	x						
Buck, J.						x	
Budd, R.			x	x			
Budd, J.						x	
Burgess, W.	x						
Burrowes, W.	x						
Burrows, J.			x				
Burton, G.	x						
Burton, J.						x	

	Trade & Commerce	Physicians & Surgeons Apothecary	Scientific Interests Occup- ation.	R.I. propri- et- or & subscrib- er.	Clergy	Not Classi- fied & No infor- mation.	Lawyer
Bury, J.						x	
Bush, T.	x						
Bushnan, J.						x	
Butler, C.							x
Butler, D.						x	
Butler, J.						x	
Butlin, J.	x						
Butlin, T.	x						
Buxton, I.		x					
Byrn, J.	x						
Cairncross, A.		x					
Callender, H.	x						
Cameron, W.						x	
Campbell, J.	x						
Canning, H.						x	
Carey, J.						x	
Carrington	x			x			
Carstairs, J.	x						
Cazalet, P.	x						
Cazenove, H.	x						
Cazenove, J.	x						
Chadwick, A.						x	
Chalmers, C.	x						
Champion, A.						x	
Champion, T.	x						
Champney, J.	x						
Chapman, W.	x						
Chater, E.	x						
Chater, N.						x	
Chauney, C.						x	
Christie, J.	x						
Christie, W.	x						
Clark, A.					x		
Clark, J.	x						
Clark, R.				x			x
Clarke, A.	x						
Clarke, B.			x				
Clarke, C.						x	
Clarke, J.						x	
Clarke, R.						x	
Clarkson, T.						x	
Coape, H.	x						
Cobb, J.	x						
Cobb, T.	x						
Cobb, T, jun.	x						
Cock, T.						x	
Cohen, J.						x	
Coles, G.	x						
Collingridge, J.						x	
Collingridge, S.							x
Collier, T.						x	
Collins, W.						x	
Combe, H.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scientific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Constable, J.	x						
Constable, M.	x						
Cooke, E.					x		
Cooke, J.		x	x				
Cooper, A.		x	x				
Cornthwaite, J.						x	
Corp, R.						x	
Cortissos, S.							x
Cotton, W.	x		x				
Coward, J.	x						
Cowie, J.	x						
Cowie, R.	x						
Crisp, T.	x						
Crowder, W.							x
Cure, C.	x						
Curry, J.		x	x				
Curtis, T.						x	
Curtis, Sir W.	x						
Curtis, W.	x						
Daniel, J.	x						
Dann, R.							x
Daubuz, J.	x						
Davidson, G.	x						
Davidson, J.	x						
Davidson, J, jun.	x						
Davidson, T.						x	
Davis, G.	x						
Davis, T.						x	
Davy, T.	x			x			
Dawes, W.	x		x				
Dawes, W.						x	
Day, R.						x	
Deacon, W.						x	
Dehorne, A.						x	
Dennison, R.		x					
Berbyshire, P.		x					
Deshons, J.	x						
Dick, Q.	x						
Dickason, T.	x						
Dickinson, H.	x						
Dickinson, J.	x						
Dimsdale, W.	x						
Divett, T.	x						
Docker, W.		x					
Docksey, J.	x						
Dominicus, G.	x						
Douglass, S.	x						
Down, R.	x						
Doxat, A. J.	x						
Doxat, J.	x						
Doxat, J. A.	x						
Driver, W.						x	
Dudley, C.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer.
Dundas,	x		x	x			
Dunston, J.		x	x				
Durant, E.	x						
Duval, D.	x						
Eade, G.	x						
Eade, W.						x	
Edwards, E.						x	
Edwards, T.	x						
Edwards, W.	x						
Eldred, T.	x						
Eliason, D.	x						
Ellice, E.	x						
Elliot, C.						x	
Ellis, T.	x						
Emes, W.	x						
Entwhistle, H.						x	
Esdaile, J.	x						
Esdaile, J, jun.	x						
Etty, Wa.	x						
Etty, Wi.	x						
Evans, J.						x	
Eykyn, J.	x						
Eykyn, R.	x						
Fardon, W.	x						
Farley, J.						x	
Farley, T.						x	
Farmer, C.						x	
Farmer, R.	x						
Farre, J.		x					
Favell, S.						x	
Favenc, A.	x						
Fayle, B.	x						
Fenn, J.	x						
Fenn, N.	x						
Fenn, N.	x						
Fennel, R.	x						
Fennel, S.	x						
Fenton, P.						x	
Field, H.		x					
Fisher, R.					x		
Flight, T.	x						
Flower, C.	x						
Ford, S.						x	
Forman, W.						x	
Forster, T.		x					
Forster, T.F.						x	
Foster, J.	x						
Foster, T.	x						
Fowler, D.	x						
Fox, J.		x	x				
Frampton, A.		x					
Frampton, T.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Frank, J.		x	x				
Franklin, J.						x	
Fraser, S.	x						
Fraser, W.	x						
French, J.						x	
Freund, W.			x				
Freshfield, W.							x
Frost, T.						x	
Frost, T, jun.						x	
Fridag, S.						x	
Fry, J.	x						
Fry, W.	x						
Fryer, G.	x						
Fulton, H.	x						
Furber, J.						x	
Gaitskell, H.	x						
Gaitskell, T.	x						
Geledneki, A.	x						
Gaitskell, W.		x					
Chrimes, W.	x						
Gibson, J.	x						
Gilbert, W.				x	x		
Giles, P.					x		
Giles, W.	x						
Gillies, W.	x						
Gold, J.	x						
Glyn, R.	x						
Goldsmid, A.	x						
Goldsmid, A, jun.	x						
Goldsmid, Alex.	x						
Goldsmid, B.	x						
Goldsmid, I.	x		x				
Goldsmid, Ash.	x						
Goldsmid, G.	x						
Gooch, G.						x	
Goodbehere, S.	x						
Gordon, A.	x						
Graham, W.						x	
Grant, A.						x	
Grant, C.	x						
Gray, E.	x						
Gray, J.	x						
Green, J.							
Green, J.						x	
Green, W.	x						
Green, W.						x	
Gregg, T.						x	
Grenfell, G.						x	
Grenside, J.	x						
Griffin, J.	x						
Grill, C.	x						
Grill, C.H.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tors & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Grosvenor, W.	x						
Guest, J.	x						
Gurney, J.							x
Hadley, S.	x						
Haighton, J.		x	x				
Hainworth, W.	x						
Halford, W.						x	
Hall, H.		x					
Hall, W.						x	
Hamilton, W.		x					
Hanbury, B.	x						
Hanbury, J.	x						
Hancock, M.	x						
Hankey, A.	x						
Hankey, J.	x						
Hankey, R.	x						
Hanson, J.						x	
Hardcastle, J.	x						
Hardy, W.	x						
Hargrave, S.					x		
Harman, J.	x						
Harris, J.	x						
Harris, J.O.	x						
Harris, R.	x						
Harris, W.			x				
Harrison, B.	x		x	x			
Harrison, G.	x						
Harrison, J.	x						
Harrison, M.						x	
Harvey, J.						x	
Hase, H.						x	
Hathaway, W.	x						
Hawes, B.	x						
Hawes, T.	x						
Hawes, W.		x					
Headington, R.		x					
Heathcote, J.	x						
Heathfield, R.	x						
Hecker, J.	x						
Henckell, G.	x						
Hennings, C.						x	
Hennington, B.						x	
Hetherington, M.	x						
Hetherington, T.	x						
Hewson, D.						x	
Hewson, J.						x	
Heygate, J.	x						
Heygate, W.	x						
Hibbert, G.	x	x					
Hibbert, J.	x						
Hibbert, W.	x						
Hick, C.	x						
Higgin, J.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy.	Not Classi- fied & No infor- mation	Lawyer
Higgins, J.						x	
Highmore, A.							x
Highmore, A, jun.	x						
Hill, G.	x						
Hillier, N.						x	
Hilton, J.						x	
Hinckley, J.				x			
Hinckley, H.	x						
Hindman, J.							x
Hingeston, J.		x					
Hoare, H.	x			x			
Hoare, S.	x						
Hoare, S, jun.	x						
Hoare, W.	x						
Hobson, W.	x		x				
Hodges, E.	x						
Holden, J.	x						
Holden, W.	x						
Holder, S.	x						
Holford, C.						x	
Hood, T.	x						
Horne, W.	x						
Horsley, M.						x	
Hougham, S.	x						
Hoy, M.	x						
Huddart, J.	x		x				
Hudson, W.						x	
Hughan, t.						x	
Hughes, R.	x						
Hulme, A.	x						
Hullet, J.	x						
Humble, J.						x	
Hunt, H.						x	
Hunt, J.						x	
Hunter, J.	x						
Hurle, H.							x
Hurlock, J.	x	x		x			
Hurst, T.	x						
Hutton, H.					x		
Inglis, H.	x						
Inglis, Jas.	x						
Inglis, Jno.	x						
Innes, J.	x						
Irving, J.	x						
Jacks, J.						x	
Jackson, J.	x						
Jackson, S.	x						
Jackson, J.	x						
Jacob, J.	x						
Jacob, W.	x						
James, J.						x	
James, R.						x	
Jameson, W.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. , proprie- tor & subscrib- er	Clergy.	Not Classi- fied & No infor- mation	Lawyer
Jarman, G.	x						
Jeffery, G.	x						
Jeffery, J.	x						
Jenner, E.		x	x				
Jenner, J.	x						
Jellicoe, J.						x	
Jessop, J.							x
Johnson, C.		x					
Johnson, J.	x						
Johnstone, J.				x			
Jones, J.		x					
Jones, S.				x			
Jones, W.	x			x			
Jourdan, J.	x						
Juckes, J.							x
Kay, J.						x	
Kelly, P.				x			
Kemble, H.						x	
Kemble, T.						x	
Kennion, J.	x						
Kennion, P.	x						
Kensington, E.						x	
Kensington, H.						x	
Kent, S.	x						
Kent, W.	x						
Key, T.		x					
Keyser, I.						x	
Keyser, R.	x						
Kiernan, J.						x	
Kinder, R.	x						
King, J.	x						
King, T.	x						
Kingston, J.	x				x		
Kingston, H.	x						
Kingston, R.	x						
Kirkman, P.	x						
Kitchener, W.	x						
Knight, R.	x			x			
Knight, R.	x						
Knowlys, T.	x						
Kymer, J.	x						
Lackington, G.	x						
Laforest, W.	x						
Laird, J.		x	x				
Lane, T.	x						
Lang, R.	x						
Langston, J.	x				x		
Langston, Z.	x						
Large, J.						x	
Larkins, J.	x						
Lavie, G.							x
Lawrence, E.	x						
Lawrence, W.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Lawson, J.				x			
Lea, R.	x						
Lee, R.	x						
Lee, S.	x						
Lee, J.						x	
Leech, J.	x						
Lees, W.						x	
Leese, L.						x	
Leighton, W.						x	
Le Mesurier, B.	x						
Le Mesurier, F.	x						
Le Mesurier, H.	x						
Le Mesurier, P.	x						
Leslie, J.						x	
Leslie, P.	x						
Lettsom, J.		x	x				
Lettsom, S.						x	
Levin, Z.	x						
Levy, A.	x						
Lewin, S.						x	
Lewis, G.	x						
Lewis, R.						x	
Lewis, T.	x			x			
Lewis, W.	x			x			
Lindsay, M.						x	
Lindo, M.	x						
Lock, C.	x						
Locke, J.	x						
Long, B.	x						
Long, S.	x						
Longman, G.	x						
Longman, T.	x						
Lonsdale, G.	x						
Lousada, M.	x			x			
Loyd, L.	x						
Loyd, T.	x						
Lubbock, J.	x						
Lubbock, J. W.	x			x			
Luck, J.	x						
Ludlam, J.	x						
Ludlam, W.						x	
Maberley, J.							x
Macaulay, Z.						x	
Mackmurdo, E.	x						
Mackurdo, E, jun.	x						
Mackmurdo, R.	x						
Mac Taggart, J.						x	
Magniac, F.	x						
Mainwaring, G.	x						
Mair, J.	x						
Maitland, A.	x						
Maitland, J.						x	

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Mallard, P.	x						
Maller, J.						x	
Maltby, T.	x						
Manfield, W.						x	
Mangles, J.	x						
Mangles, J.	x						
Manning, W.	x			x			
Manser, W.	x						
Marcet, A.		x	x	x			
Marsden, R.	x						
Marsden, W.	x						
Marsh, T.						x	
Marten, R.						x	
Marter, W.	x						
Martin, F.	x						
Martineau, P.	x						
Martineau, P, jun.	x						
Martineau, D.	x						
Martineau, J.	x			x			
Mason, Good, J.		x	x				
Mather, T.	x						
Maud, J.						x	
Maud, W.						x	
Mawman, J.	x						
Mello, A.	x						
Menet, J.	x						
Milburn, W.	x						
Millet, G.	x						
Mill, J.						x	
Mills, S.	x						
Minet, J.	x						
Minshull, G.							x
Minshull, W.						x	
Mocatta, D.	x						
Moffatt, T.	x						
Molling, F.						x	
Moore, D.			x	x			x
Moore, F.		x					
Moore, J.						x	
Moore, W.	x						
Morgan, G.		x					
Morgan, B.						x	
Morland, G.						x	
Morris, C.	x						
Morrison, J.						x	
Muller, C.	x						
Muller, S.							x
Mullet, T.	x						
Munro, G.	x						
Murdock, T.	x						
Murray, C.							x
Nash, W.						x	
Neave, R.	x						
Neilson, A.						x	

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer.
Newman, G.						x	
Newman, H.						x	
Newman, Jas.						x	
Newman, Jno.						x	
Nichols, J.			x				
Nicholson, S.	x						
Nicholson, T.	x						
Nightingale, T.	x						
Nisbett, T.						x	
Nixon, R.	x						
Noble, R.	x						
Norman, R.	x						
Norris, W.		x					
Norton, J.						x	
Noyes, J.						x	
Oakley, B.	x						
Orme, C.	x						
Pacifico, E.		x					
Page, C.	x						
Palmer, G.	x						
Palmer, J.						x	
Palmer, J.	x						
Palmer, N.						x	
Palmer, T.				x			x
Parker, S.	x						
Parker, W.	x						
Parkes, S.			x				
Parry, H.	x						
Peacock, J.						x	
Pearkes, J.	x						
Pattison, J.	x						
Pearsall, J.						x	
Pearson, J.	x						
Pennington, J.	x						
Pepys, H.			x				
Pepys, W.			x	x			
Perigal, F.	x						
Perry, J.	x						
Pett, S.		x					
Pettit, R.	x						
Phillips, R.		x	x				
Phillips, W.	x		x				
Phillips, W.						x	
Pieschell, C.	x			x			
Pigou, F.	x						
Pilgrim, C.						x	
Pinchback, W.	x						
Pistor, W.	x						
Plumer, T.	x						
Plumer, T.W.	x						
Plumer, J.	x						
Podmore, R.	x						
Pope, M.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Popplewell, J.	x						
Porson, R.						x	
Poynder, T.	x						
Poynder, T, jun.	x						
Pratt, J.					x		
Price, C.						x	
Prickett, R.						x	
Prickett, W.						x	
Prinsep, J.	x						
Proctor, F.						x	
Pryor, R.	x						
Pugh, J.		x					
Raikes, G.	x						
Raikes, J.	x						
Raikes, R.	x						
Raikes, T.	x			x			
Raine, M.			x		x		
Ramsbotham, J.						x	
Ramsbottom, J.	x						
Ramsbottom, R.	x						
Ramsden, T.		x					
Randall, R.	x						
Randall, W.						x	
Rankin, R.	x						
Raper, M.			x				
Ravenhill, J.	x						
Rawlins, W.						x	
Ray, R.						x	
Reay, J.						x	
Reece, W.						x	
Rees, A.			x		x		
Rees, O.	x						
Reeve, J.	x			x			
Reid, T.	x						
Remington, W.	x						
Rennie, J.			x	x			
Reynolds, J.	x						
Reynolds, J.F.						x	
Reynolds, T.						x	
Reynolds, W.	x						
Reynolds, W.F.						x	
Rhodes, T.	x						
Ricardo, D.	x						
Ricardo, M.		x					
Rickards, J.	x						
Rickards, T.						x	
Rickman, J.						x	
Ridout, J.		x	x				
Rigby, T.							x
Ripley, F.	x						
Ripley, H.	x						
Ripley, J.	x						
Rivaz, V.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor& subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Robarts, A.	x						
Robarts, A.W.	x						
Roberts, J.	x						
Roberts, Jos.	x						
Roberts, T.	x						
Roberts, T, jun.	x						
Robinson, A.	x						
Robinson, G.	x					x	
Robinson, J.						x	
Robinson, S.							
Rogers, C.	x					x	
Rogers, H.							
Rogers, J.	x					x	
Rohde, S.							
Row, W.	x						
Row, W, jun.	x						
Rowcroft, T.	x			x			
Rutt, J.	x						
St, Barbe, J.	x						
St. Leu, C.						x	
Salte, W.	x						
Salte, W.G.	x					x	
Salter, J.							
Samuda, D.	x						
Sansom, P.	x						
Saunders, J.	x						
Saunders, T.	x						
Saunders, W.		x	x	x		x	
Savill, E.						x	
Savill, T.						x	
Savill, W.							
Scholey, G.	x					x	
Scott, J.							x
Setree, H.						x	
Seward, H.							
Sharp, G.	x						
Sharp, R.	x		x				
Sharp, R.							x
Sharp, W.	x						
Sharpe, L.	x						
Sharpe, R.	x						
Sharwood, S.	x						
Shaw, B.	x						
Shaw, B, jun.	x						
Shaw, Jas.	x						
Shaw, Jno.						x	
Shaw, Jno.						x	
Shaw, R.						x	
Shaw, E.						x	
Shaw, S.						x	
Shearman, T.							x
Shee, J.	x						
Shee, T.	x						

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Shepherd, W.	x						
Shepley, H.	x						
Shepley, M.	x						
Sheppard, T.	x						
Shuttleworth, G.	x						
Sikes, W.	x						
Sims, J.		x					
Sims, W.						x	
Skey, J.		x				x	
Slack, T.						x	
Slack, T.C.							x
Slade, R.							
Slark, W.	x						
Smith, C.	x						
Smith, E.							x
Smith, G.	x						
Smith, H.	x						
Smith, H.E.	x						
Smith, Jno.	x						
Smith, Jo.	x						
Smith, Jos.	x						
Smith, W.	x						
Solomons, P.						x	
Soret, J.	x						
Stainforth, R.	x						
Steele, J.		x					
Steele, I.						x	
Stephens, J.						x	
Sterry, A.	x						
Sterry, H.						x	
Stevens, H.						x	
Stevens, Rob.						x	
Stevens, Rich.						x	
Stevens, W.							x
Stevenson, J.	x						
Stockwell, J.	x						
Stout, J.						x	
Stratton, S.	x						
Stuart, J.			x				
Styan, T.	x						
Sutton, R.						x	
Swain, T.							x
Swaine, E.	x						
Swift, J.	x						
Tabor, R.						x	
Taddy, J.	x						
Taverner, J.	x						
Taylor, J.						x	
Taylor, R.				x			
Taylor, T.	x						
Taylor, W.				x			
Tenant, G.						x	
Terry, E.						x	

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Terry, J.						x	
Terry, T.						x	
Thelusson, C.						x	
Thirlwall, T.					x		
Thomas, P.						x	
Thomas, R.	x						
Thomas, W.	x						
Thompson, J.	x						
Thomspon, W.						x	
Thomson, J.						x	
Thorley, R.	x						
Thornthwaite, T.						x	
Thornton, H.	x			x			
Thorp, S.	x						
Ticknell, Jno.						x	
Tickell, Jos.	x						
Till, H.	x						
Tillock, A.			x				
Tomkins, B.	x						
Tomlinson, G.							x
Toulmin, J.		x					
Towers, T.						x	
Towgood, J.	x						
Towgood, W.	x						
Townsend, W.	x						
Towse, J.							x
Travers, B.						x	
Travers, J.	x						
Treacher, J.	x						
Trower, H.	x		x				
Trower, J.	x						
Tuffen, J.	x						
Turing, J.	x						
Turner, C.	x						
Turner, W.						x	
Tyrrel, T.							x
Upton, J.		x					
Valentine, J.						x	
Vandercom, J.			x	x			x
Vaughan, W.	x		x	x			
Vaux, E.	x						
Vaux, G.		x					
Vaux, J.	x						
Venn, E.	x						
Vine, J.						x	
Vowler, W.	x						
Wakefield, F.	x						
Walker, J.		x					
Walker, R.			x				
Wall, C.	x						
Walsh, B.						x	
Wansey, W.	x						
Warburton,						x	

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy	Not Classi- fied & No infor- mation	Lawyer
Ward, J.						x	
Ward, S.	x						
Ware, J.		x	x				
Warre, T.	x						
Warren, J.			x	x			
Watson, J.	x					x	
Watson, W.							
Watt, J.			x				
Watts, D.	x			x			
Waymouth, C.						x	
Waymouth, F.	x						
Waymouth, H.						x	
Weddell, S.	x						
Wells, R.S.	x			x			
Welsford, S.						x	
Welsford, J.						x	
Were, R.	x					x	
Westley, J.							x
Weston, A.							x
Weston, Jas.							
Weston, Jno.		x					
Wetherhead, T.	x						
Wetherhead, T.T.	x						
Wheeler, W.		x					
White, S.						x	
Whitifeld,					x		
Wigram, H.	x						x
Wigram, Jas.							
Wigram, Jno.	x						
Wigram, M.	x						
Wigram, O.	x						
Wigram, R.	x						
Wigram, R, jun.	x						
Wigram, W.	x						
Wilby, T.						x	
Wildman, H.	x						
Wilkinson, Jas.						x	
Wilkinson, Jno.		x					
Williams, A.		x					
Williams, J.	x						
Williams, M.						x	
Williams, S.	x						
Williams, W.			x				
Willis, A.						x	
Wilson, J.						x	
Wilson, J.						x	
Wilson, R.	x						
Wilson, W.	x						
Windle, T.						x	
Winter, J.							x
Wiss, J.	x						
Wiss, M.						x	
Wiss, R.						x	

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests Occup- ation	R.I. proprie- tor & subscrib- er	Clergy, Not Classi- fied & No infor- mation	Lawyer
Wood, G.	x					
Wood, L.					x	
Woods, H.					x	
Woods, J.			x			
Woods, S.	x		x			
Woodbridge, J.					x	
Woodward, G.	x					
Woolaston F.					x	
Wollaston, G.	x					
Wright, C.	x					
Wynch, P.B.					x	
Wynch, P.M.					x	
Yelloly, J.		x	x			
Young, J.					x	
Young, J.	x					
Young, R.	x					

Summary.

941 signatures were obtained for original shares. The temporary committee of managers was empowered to elect suitable individuals to proprietorships and 41 were so elected, giving a total of 965 original proprietors. According to the first auditors' report in 1807, 961 shares had been issued. Of those who signed for a share, Alexander Aubert and Paul Le Mesurier died before the Charter was granted and presumably two others failed to purchase shares.

The number of proprietors was at first limited to 1,000, although this number was never reached. However, in the Journal for November 1878, an article entitled 'Rights and Privileges of Proprietors' states that "The London Institution is an association of 950 proprietors....." There is no indication of when this lower limit was fixed.

The following analysis of original proprietors includes the original signatories (with Alexander Auber and Paul Le Mesurier) and the elected proprietors.

Trade and commercial interest.....	557	57.6%
Physicians, surgeons, etc.....	68	6.0%
Scientific occupation or interests.....	71	6.4%
Proprietor or subscriber of Royal Institution	47	4.9%
Legal profession.....	40	4.0%
Clergy.....	13	1.3%
Not classified or no information.....	254	26.2%

Appendix III

Members of the First Committee of Managers under the Charter.

President: * Secretary: Samuel Woods
 * Sir Francis Baring. * Treasurer: Sir William Curtis

Vice-presidents:

Sir Richard Neeve. (for 4 years)
 * Beeston Long (for 3 years)
 * George Hibbert (for 2 years)
 * J.J. Angerstein (for 1 year)

Managers.

For 4 years:

* Richard Clark
 * Matthew Raine.
 * Richard Sharp
 * John Smith
 * Henry Thornton

For 3 years:

Jeremiah Harman
 * Benjamin Harrison
 * W.H. Pepys
 * John Rennie
 * Robert Wigram

For 2 years:

* Thomas Bodley
 Charles Bosanquet
 John Peter Hankey
 Joseph Huddart
 * Job Matthew Raikes

For 1 year

* Thomas Baring
 Samuel Boddington
 Nathaniel Bogle, French
 William Henry Hoare
 Abraham Wilday Robarts

Visitors:

For 4 years:

* Henry Hoare
 Edward Jenner
 William Saunders

For 3 years:

Sir William Blizard
 * Sir Charles Price
 James Shaw

For 2 years

Thompson Bonar
 * Harvey Christian Combe
 * Sir Hugh Inglis

For 1 year:

Charles Grant
 Robert Hankey
 * William Manning

* Member of Temporary Committee of Managers

Analysis of First Committee of Managers.

	Trade & Commerce	Physicians & Surgeons Apothecary	Scien- tific Interests	R.I. proprie- tor & subscri- ber	Clergy	Not Classi- fied	Lawyer
Angerstein, J.J.	x			x			
Baring, F.	x			x			
Baring, T.						x	
Blizard, W.		x	x				
Boddington, S.	x			x			
Bodley, T.	x						
Bogle-French, N.	x						
Bonar, T.	x			x			
Bosanquet, C.	x						
Clark, R.				x			x
Combe, H.	x						
Curtis, W.	x						
Hankey, J.	x						
Hankey, R.	x						
Harman, J.	x						
Harrison, B.	x		x	x			
Hibbert, G.	x		x				
Hoare, H.	x			x			
Hoare, W.	x						
Huddart, J.	x		x				
Inglis, H.	x						
Jenner, E.		x	x				
Long, B.	x						
Manning, W.	x			x			
Neave, R.	x						
Pepys, W.			x	x			
Price, C.							
Raikes, J.	x						
Raine, M.			x			x	
Rennie, J.			x	x			
Robarts, A.	x						
Saunders, W.		x	x	x			
Sharp, R.							
Shaw, J.	x						
Smith, J.	x						
Thornton, H.	x			x			
Wigram, R.	x						
Woods, S.	x						

Temporary Manager.

Summary.

Temporary Committee.

Trade & commercial interest:	16	69.6%
Physician, etc.	: 0	-
Scientific occup. or inter. :	5	21.7%
Proprietor or subscriber of :	9	39%
R.I.		
Clergy	: 1	4.3%
Legal	: 1	4.3%
Not classified	: 1	4.3%

First Committee under Charter.

Trade & commercial interest :	28	73.7%
Physicians etc.	: 3	8%
Scientific occup. or inter. :	9	24%
Proprietor or subscriber of :	12	32%
R.I.		
Clergy	: 1	2.6%
Legal	: 1	2.6%
Not classified	: 1	2.6%

Appendix IV Table 1.Cost of Books and Binding, 1805-1912.

Year	Cost	Year	Cost	Year	Cost	Year	Cost
1805-6	£9,174/6/-	1833	£289/12/8	1860	£249/14/2	1887	£497/11/2
1807	£1,775/10/-	1834	£356/-/4	1861	£323/6/3	1888	£762/11/9
1808	£944/4/10	1835	£623/2/4	1862	£273/-/9	1889	£855/13/2
1809	£502/15/10	1836	£492/15/3	1863	-	1890	£1,134/14/2
1810	£1,887/11/3	1837	£526/17/9	1864	£309/17/2	1891	£1,509/13/-
1811	£1,625/10/11	1838	£548/1/7	1865	£243/9/-	1892	£763/16/7
*1812	£932/-/6	1839	£406/4/4	1866	£282/18/4	1893	£741/12/7
*1813	£245/-/11	1840	£577/11/5	1867	£255/16/9	1894	£644/18/3
*1814	£274/2/1	1841	£531/4/5	1868	£212/16/4	1895	£513/1/4½
*1815	£195/9/7	1842	£477/13/11	1869	£243/13/9	1896	£408/7/7
1816	£246/16/6	1843	£465/18/4	1870	£245/10/1	1897	£465/18/5
1817	£145/5/8	1844	£560/-/10	1871	£185/1/10	1898	£473/3/9
*1818	£125/15/5	1845	£601/15/4	1872	£190/3/4	1899	£562/11/6
1819	£263/-/11	1846	£398/-/7	1873	£335/19/8	1900	£461/7/-
1820	£165/16/2	1847	£390/19/3	1874	£250/18/7	1901	£335/8/3
1821	£298/19/11	1848	£413/-/5	1875	£292/4/5	1902	£385/1/1
*1822	£272/14/-	1849	£441/14/1	1876	£319/14/10	1903	£379/2/5
*1823	£516/7/-	1850	£558/3/6	1877	£656/3/7	1904	£374/18/5
*1824	£361/19/6	1851	£494/17/9	1878	£591/3/7	1905	£297/6/8
*1825	£407/12/-	1852	£436/11/-	1879	£563/2/2	1906	£230/3/8
*1826	£476/10/6	1853	£475/5/2	1880	£704/3/11	1907	£172/12/1
*1827	£396/18/6	1854	£448/1/5	1881	£936/6/4	1908	£131/8/2
1828	£326/13/-	1855	£472/7/5	1882	£646/11/1	1909	£120/19/4
1829	£236/2/9	1856	£429/15/5	1883	£762/10/6	1910	£142/7/2
1830	£333/-/-	1857	£445/10/11	1884	£851/17/11	1911	£101/4/-
1831	£302/2/2	1858	£311/6/8	1885	£620/17/3		
1832	£365/7/2	1859	£273/18/6	1886	£574/1/6		

* Generally, "Books & Binding" are listed as one item although in some instances, they are entered as two separate items on the balance sheet. In years marked #, the cost is simply entered as "Books".

† The sudden sharp drop in expenditure on books resulted from the 1812 financial crisis, when expenditure on books was ordered to be suspended, in April, 1812.

Also, the high level of expenditure of the library is probably the result of Nicholson's 1880 report, to when many of the books were stated to be in need of repair and rebinding.

After 1869, library costs also include the purchase of books for the permanent circulating library.

Appendix IV Table 2Analysis of Books in L.I. Library in 1835.

The book classes are those used in the 1835 volume of the Catalogue.

Percentages.

Theology	4%	*Histories of Inventions	0.06%
Jurisprudence	3.6%	Horsemanship & Recreative Arts	0.16%
Philosophy	2.66%	Geography	1.1%
*Mathematics	2.35%	Travels & Voyages	6.3%
*Astronomy	1.5%	History	34.6%
*Physics	2.2%	Antiquities	1.6%
*Chemistry	2.7%	Biography	5.2%
*Natural History	2.2%	Bibliography	1.7%
*Botany	1.3%	Grammars & Dictionaries	2.9%
*Agriculture	1.7%	History & Art of Writing	0.16%
*Zoology	0.55%	History & Art of Printing	0.27%
*Medical Science	3%	Literature	0.6%
Music	0.2%	Greek and Roman Classics	7.3%
Fine Arts	1.1%	English Literature	4.1%
Architecture	1.1%	French Literature	1.3%
Military Science	0.48%	Italian Literature	0.8%
Military History	0.4%	Spanish and Portuguese Lit.	0.3%
*Navigation	0.6%	German Literature	0.08%
Naval History	0.16%		
*Mechanical & other useful Arts	0.33%		
*Dictionaries of Arts & Sciences	0.08%		

* "Scientific " subjects.

Although taken by themselves, the individual science subjects are small in number, considered together (adding those marked*) they make up 16.6% of the total. Obviously, this does not match up to the very high percentage of history books (see main aims, pl) almost 10% of which were on ancient history. The "useful arts" have a very small representation.

Perhaps the distribution of books reflects their availability in the various subjects. (Although I would have expected a higher proportion of Greek and Latin Classics).

N.B. Percentages represent the number of individual works, not the number of volumes contained in any particular work.

Appendix V

The Cost of the Circulating Library

Key to Libraries:

1. A.M.L., Augener's Music Library.¹
2. D.L. Day's Library (See p.115 note.)
3. E.F.L., English and Foreign Circulating Library.²
4. L.C., Library Company (see p.113 note.)
5. L.L., London Library
6. L.S.L., Lewis' Scientific Library (See p.115 note.)
7. M.L., Mudie's Library. (see p.113 note.)
8. N.E.C., Novello, Ewer & Co. (Music)⁴
9. R.F.L. Rolandi's Foreign Library (see p.115 note.)
10. W.H.S., W.H. Smith & Son, Ltd. (see p.114 note.)

1. Augener Ltd, was a firm of music publishers in Great Marlborough St.

It was founded by George Augener (d.1915) at premises at 86, Newgate St. In 1878, the firm began printing its own publications, but no information is available concerning the music library.

2. The English and Foreign Library Co. Ltd., was formerly Hookham's Library, founded in 1764. It experienced difficulties in competing with Mudie and became a limited company in 1865, finally disappearing in 1871 when Mudie took over what was left after its collapse.

3. The London Library opened in 1841, largely owing to the efforts of Thomas Carlyle and his friends, who were dissatisfied with the service offered by the British Museum. The original premises were in Pall Mall but before long, the library moved to 14, St. James's Square, where it is still housed.

4. Novello, Ewer & Co. were music publishers and sellers of 1, Berners St., Oxford St., but no information is available on this library.

Appendix V Table 1.Cost of the Circulating Library.

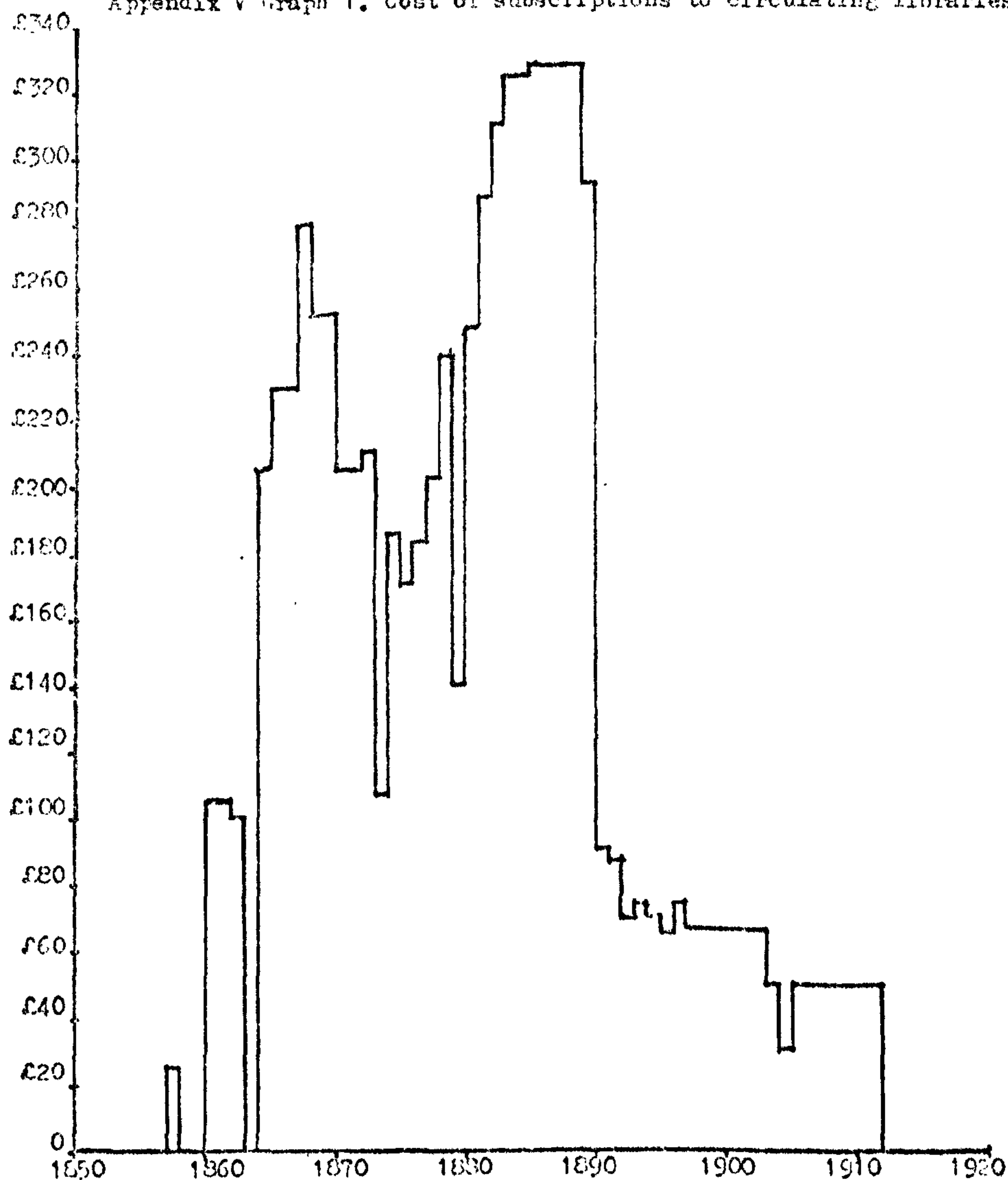
Year	Amount paid	To whom paid	Year	Amount paid	To whom paid
1857-8	£25	M.L.	1877-8	£193 £6/6/- £10/10/- £12/12/-	W.H.S. A.M.L. L.S.L. R.F.L.
1860-1	£105	M.L. (1)			
1861-2	£105	M.L.	1878-9	£200 £16/16/- £10/10/- £12/12/-	W.H.S. A.M.L. L.S.L. R.F.L.
1862-3	£100/10/6	L.C.			
1863-4	Not known		1897-80	£100 £16/16/- £10/10/- £12/12/-	W.H.S. A.M.L. L.S.L. R.F.L.
1864-5	£200 £5/5/-	W.H.S. E.F.L.			
1865-6	£225 £5/5/-	W.H.S. E.F.L.	1880-1	£206 £16/16/- £15/15/- £9/9/-	W.H.S. A.M.L. L.S.L. R.F.L.
1866-7	£250 £5/5/-	W.H.S. E.F.L.			
1867-8	£275 £6/6/-	W.H.S. R.F.L.	1881-2	£222 £22/1/- £16/16/- £9/4/5 £18/18/-	W.H.S. D.L. A.M.L. L.S.L. R.F.L.
1868-9	£250 £6/6/-	W.H.S. R.F.L.			
1869-70	£250 £6/6/-	W.H.S. R.F.L.	1882-3	£210 £44/2/- £21 £15/15/- £18/18/-	W.H.S. D.L. N.E.C. L.S.L. R.F.L.
1870-1	£200 £6/6/-	W.H.S. R.F.L.			
1871-2	£200 £6/6/-	W.H.S. R.F.L.	1883-4	£235 £49 £21 £18/18/-	W.H.S. D.L. L.S.L. R.F.L.
1872-3	£200 £9/9/-	W.H.S. R.F.L.			
1873-4	£100 £6/7/-	W.H.S. R.F.L.	1884-5	£235 £49 £21 £18/18/-	W.H.S. D.L. L.S.L. R.F.L.
1874-5	£175 £6/6/- £5/5/-	W.H.S. R.F.L. L.S.L.			
1875-6	£150 £8/8/- £12/12/-	W.H.S. R.F.L. L.S.L.	1885-6	£235 £49 £21 £22	W.H.S. D.L. L.S.L. R.F.L.
1876-7	£166 £8/8/- £10/10/-	W.H.S. R.F.L. L.S.L.			

(1) First mention in list of annual expenditure.

Cost of the Circulating Library (cont'd).

Year	Amount paid	To whom paid	Year	Amount paid	To whom paid
1886-7	£235	W.H.S.	1895-6	£49	D.L.
	£49	D.L.		£15/15/-	L.S.L.
	£21	L.S.L.	1896-7	£49	D.L.
	£22	R.F.L.		£15/15/-	L.S.L.
1887-8	£235	W.H.S.		£7	L.L.
	£49	D.L.	1897-8	£49	D.L.
	£21	L.S.L.		£15/15/-	L.S.L.
	£22	R.F.L.	1898-9	£49	D.L.
1888-9	£235	W.H.S.		£15/15/-	L.S.L.
	£49	D.L.	1899-1900	£49	D.L.
	£21	L.S.L.		£15/15/-	L.S.L.
	£22	R.F.L.	1901-2	£49	D.L.
1889-90	£105	W.H.S.		£15/15/-	L.S.L.
	£49	D.L.	1902-3	£49	D.L.
	£15/15/-	L.S.L.		£15/15/-	L.S.L.
	£22	R.F.L.	1903-4	£49	D.L.
1890-1	£49	D.L.	1904-5	£30/12/6	D.L.
	£15/15/-	L.S.L.	1905-6	£49	D.L.
	£22	R.F.L.	1906-7	£49	D.L.
	£3/10/-	L.L.	1907-8	£49	D.L.
1891-2	£49	D.L.	1908-9	£49	D.L.
	£22	R.F.L.	1909-10	£49	D.L.
	£15/15/-	L.S.L.	1910-1	£49	D.L.
1892-3	£49	D.L.	1911-2	£49	D.L.
	£15/15/-	L.S.L.			
	£3/10/-	L.L.			
1893-4	£49	D.L.			
	£15/15/-	L.S.L.			
	£7	L.L.			
1894-5	£49	D.L.			
	£15/15/-	L.S.L.			
	£3/10/-	L.L.			

Appendix V Graph 1. Cost of subscriptions to circulating libraries.



Note:

1. The balance sheet for 1863-4 is missing and so no information on cost is available.
2. The fall in cost after 1870 was caused by the introduction of the Institution's own circulating library, but increased popularity caused a large increase in payments in the 1880s.
3. The sudden drop after 1890 was caused by the necessity to economise after costly repairs to the building.

Appendix VI

List of Lectures and Soirees1819 - 20

G. Birkbeck - On Natural Philosophy - 15 lects. (honorary)

J. Millington - On Experimental Philosophy - 14.

R. Phillips - On the Elements of Chemistry - 13.

J. Taylor - On Practical Mining - 4.

J.E. Smith - On Botany - 2.

W. Crotch - Style in Musical Composition - 6.

1820 - 21. No lectures delivered.

1821 - 22.

R. Phillips - On Analytical Chemistry - 10.

W.T. Brande - On Geology - 9.

J. Millington - On Astronomy - 12.

1822 - 23.

C.F. Partington - On Natural Philosophy (introductory) - 6.

W.T. Brande - On Electricity - 8.

R. Phillips - On Chemistry as connected with the Arts - 10.

W. Crotch - On National and Scientific Music - 6.

J. Taylor - On Metallurgy - 3(honorary)

G. Birkbeck - On the Atmosphere - 7.

T.F. Dibdin - On the History of Literature in Britain - 10.

1823 - 24.

R. Phillips - On Mineralogical Chemistry - 9.

P.M. Roget - On Comparative Physiology - 12.

G. Birkbeck - On Magnetism - 4.

W.T. Brande - On Vegetable Chemistry - 4.

1824 - 25.

P.M. Roget - On Comparative Physiology - 12.

R. Phillips - On Aeriform and Gaseous Fluids - 12.

W.T. Brande - On Light, Heat and Electricity - 12.

Marquis di Spineto - On the Literature of Modern Europe - 12.

J.E. Smith - On Botanical Physiology - 10.

C.F. Partington - A Course of 8 Lectures to illustrate the Progress of
Science to Young People.*

*Mentioned in M.S.3076, but not in chronological list of lectures.

1825 - 26

C.F. Partington - On Experimental Philosophy - 9.

J. Harwood - On the Natural History of the Animal Kingdom - 12.

W. Crotch - On Musical Composition - 10.

G. Spurzheim - On Phrenology - 16.

P.M. Roget - On the Physiology of the External Senses - 12.

J.R. McCulloch - On the Capital, Currency and Commerce - 12.

Stephen Lee - On Astronomy - 8.

1826 - 27.

C.F. Partington - On General Science and the Useful Arts - 9.

W. Crotch - On Musical Composition - 8.

M. Faraday - On Chemical Manipulation - 12.

T. Webster - On Geology - 12.

J. Wallis - On Astronomy - 8.

J.G. Spurzheim - On Phrenology - 12.

1827 - 28.

C.F. Partington - On the Properties of Water - 4.

N. Webster - On the Motive Forces of the Arts - 10.

E.W. Brayley - On Igneous Meteors and Meteorites - 6.

Lectures 1820 - 1840 (cont'd)1827 - 28 (cont.)

S. Wesley - On Music - 6.

J. Thelwall - On Poetry and the Drama - 10.

E.J. Clark - On Botany - 4(honorary).

Soirees: Wed, Feb. 6, 20; Mar. 5, 19; Apr. 2, 16; May 7, 21.

1828 - 29.

J.G. Wood - On the Antiquities of the Ancient World - 8.

J. Wallis - On Astronomy - 8.

T. Adams - On Music - 8.

B.H. Smart - On Elocution - 10.

C.F. Partington - On Manipulation in Natural and Experimental Philosophy - 8.

J. Frost - On Botany - 4 (honorary)

Soirees: Wed, Jan. 6; Feb. 14, 18; Mar. 4, 18; Apr. 1, 15; May 6.

1829 - 30

J.S. Buckingham - On the Eastern World - 12.

T. Phillips - On Singing - 8.

R.R. Reinagle - On Painting - 8.

C.F. Partington - On the Applications of Science to the Useful Arts - 8.

Soirees: Wed. Feb. 17; Mar. 3, 17, 31; Apr. 14, 28.

(The soiree on March 3 consisted of a talk by R. Watson on "An Invention for Preventing Ships from Foundering at Sea.")

1830 - 31.

J. Pereira - On the Philosophy of the External Senses - 8.

W. Crotch - On Music - 8.

J. Britten - On Architecture - 8.

Soirees:

Feb. 23 - G. Birkbeck - On Newly Invented Musical Instruments (e.g. seraphine, Accordion.) - assisted by Mr. Broadhurst, Master Howe, Mr. Hawkins, Mr. Edward Taylor.

Lectures 1820 - 1840 (cont'd)1830 - 31 Soirees (cont.)

Mar.9 - J. Hemming - On the Adulteration of Articles of Domestic Use.

Mar.23 - E.J. Clark - On the Ascent of Mont Blanc.

April 6 - J. Smith - On Smith and Daulier's System of Education.

April 20 - E.J. Clark - On Pompeii and Vesuvius.

May 4 - W. Tite - On the Discoveries of Dr. Young and M. Champollion,
relating to Egyptian hieroglyphics.

1831 - 32.

J. Hemming - On Chemistry and its Application to the Arts - 8.

J. Rennie - On Zoology - 6.

D. Lardner - On Pneumatics - 5.

T. Southwood Smith - On the Functions of the Animal Economy - 8 (postponed).

J.S. Knowles - On Dramatic Poetry - 6.

E.J. Clark - On the Philosophy of Final Causes - 8.

T. Adams. - On Music - 8.

Soirees:

Feb.22 - On the Properties of Gold.

Mar. 7 - G. Birkbeck - On Railroads and Steam Carriages.

Mar.28 - C. Pemberton - On Oratory and Declamation.

Apr. 4 - G. Birkbeck - On the Manufacture of Cotton by Machinery.

Apr.18 - D. Lardner - On Light.

May 2 - B. Montagu - On Laughter.

1832 - 33.

J. Wallis - On Astronomy - 8.

T. Southwood Smith - On the Functions of the Animal Economy - 8.

R. Addams - On Accoustics - 4.

J.L. Levison - On Phrenology - 4.

A. Marcel - On the Teaching of Living Languages. - 2.

Lectures 1820 - 1840 (cont'd)1832 - 33 (cont.)

E. Taylor - On English Vocal Harmony - 4.

J. Hemming - On the Atmosphere - 8.

J. Pereira - On Animal Mechanics - 6.

R. Dickson - On Vegetable Physiology - 8.

C. Pemberton - On Oratory - 5.

Soirees:

Jan.30 - A. Gordon - On Locomotion and Steam Carriages.

Feb.13 - J. Taylor - On the Means of Attaining Great Depths in Mines.

Feb.27 - E.W. Brayley - On the Distribution of the powers of Producing Heat
and Light in the Animal Kingdom.

Mar. 13 - J. Hemming - (no title given).

Mar.27 - B. Montagu - On Laughter (second lecture)

April 10 - Marquis di Spineto - On Idol Worship.

April 24 - E.W. Brayley - On Hall's Condensing Engine and Refrigerating
Apparatus.

May 8 - J. Pereira - On Poisons.

1833 - 34.

W. Ritchie - On Electricity - 8.

Marquis di Spineto - On the Origins of Idolatry - 10.

E.W. Brayley - On the Natural Arrangement of Animals - 5.

W.T. Brande - On Geology - 6.

T. Phillips - On Vocal Music - 6.

R.R. Reinagle - On Painting - 8.

J. Hemming - On the Discoveries of Chemistry - 8.

Soirees:

Feb.5 - E. Atherston - On Elocution.

Feb.17 - E. Dent - On the Use of Glass for the Springs and Balances of Watches.

Lectures 1820 - 1840 (cont'd)1833 - 34 Soirees (cont.)

Mar.5 - J. Thelwall - On the Oratory of the Senate.

Mar.17 - B. Montagu - On the Character and Writings of Bacon.

April 2 - R. Bond - On the Poetry of Scandinavia.

April 17 - G. Birkbeck - On the Oxy-hydrogen Microscope.

1834 - 35.

W.T. Brande - On the Application of Chemistry to the Arts - 8.

E. Taylor - On the Early English Opera - 6.

W. Ritchie - On Radiant Heat and Light - 8.

R.E. Grant - On the Invertebrated Classes of Animals - 8.

H. Innes - On the Literature of Great Britain. - 6.

G. White - On the Cotton Manufacture - 6.

D. Allport - On the Pyramids of Egypt - 2.

Soirees:

Feb.25 - J.A. Heraud - On the Writings and Philosophical Character of Coleridge.

Mar.11 - J. Wallis - On Comets.

Mar.25 - On the Poetry and Prose Writers of England.

April 8 - G. Birkbeck - On Improvements in Artificial Illumination.

1835 - 36.

R. Dickson - On the Part Performed in Nature by the Vegetable Kingdom - 6.

J. Wallis - On Astronomy - 10.

W. Ritchie - On Mechanical Philosophy - 8.

C.C. Clark - On the History of Painting in Italy - 4.

H. Innes - On Dramatic and General Literature - 6.

E. Taylor - On the English Opera (Second series) - 6.

J. Hemming - On the Application of Science to Domestic Economy - 8.

1835 - 36 (cont'd)

Soirees:

Feb.24 - W. Ritchie - On Rail Roads and the Application of Steam to Locomotion.

Mar.9 - G. Birkbeck - On the Manufacture of Steel Pens.

Mar.23 - W. Tite - On the Results of Literary Expeditions to Egypt as

Developed in the Great Work of Rossellini.

April 6 - G. Birkbeck - On the Properties of Caout-chouc.

1836 - 37.

W.T. Brande - On Dietetic Chemistry - 6.

W. Chalklen - On Taste - 6.

G. Birkbeck - On the Characteristics of Insects - 3.

J.S. Knowles - On the Drama - 6.

W. Ritchie - On Voltaic Electricity and Magnetism - 6.

R. Addams - On Accoustics - 4.

C.C. Clark - On the Early English Poets - 4.

H.J. Gauntlett - On Ecclesiastical Music - 6.

R. Bond - On Physical Geography - 4.

H. Innes - On the Sacred Poetry of Great Britain - 3.

Soirees:

Feb.22 - E. Cowper - On the Machinery of Steam Printing.(Applegarth &
Cowper's Machine).

Mar.8 - T.J. Pettigrew - On the Coverings and Ornaments of Egyptian Mummies.

Mar.22 - B. Montagu - A discourse on Ghosts.

April 5 - G. Birkbeck - On Modern Telescopes and Microscopes.

1837 - 38.

R. Addams - On Hydrostatics and Hydrodynamics - 6.

H.S. Boase - On Tin and Copper - 2.

M. Truman - On Comparative Physiology - 6.

H. Innes - On the Sacred Poetry of the Hebrews - 4.

Lectures 1820 - 1840 (cont'd)1837 - 38 (cont.)

D. Lardner - On the Steam Engine - 6.

W. Rider - On Perspective and Painting - 4.

E. Taylor - On the English Opera (third series) - 6.

C.C. Clark - On the Early English Poets (continuation) - 4.

J.F. Daniell - On Electrochemistry - 6.

J. Phillips - On the Leading Truths in Geology - 6.

Soirees:

Mar.7 - C. Woodward - On the Polarisation of Light.

Mar.21 - G. Birkbeck - On the Measurement of Time.

April 4 - W. Smith - On the Intellectual Advantages Resulting from Modern
Science.

April 18 - W. Tite - On the Literary Results of the Expedition to Egypt
under Buonaparte.

1838 - 39.

W.T. Brande - On Experimental Chemistry - 6.

S. Solly - On Comparative Physiology - 6.

J. Wallis - On Astronomy - 8.

T. Southwood Smith - On Organisation and Life - 6.

W. Rider - On Engraving - 3.

T.J. Serle - On the Drama - 6.

E. Taylor - On the Musical Composers of Italy of the 16th Century - 6.

J. Phillips - On the Variation of the Heat of the Globe as a Cause of
Geological Phenomena - 6.

C.C. Clark - On the British Poets (cont'd)- 4.

R. Addams - On Acoustics - 6.

Lectures 1820 - 1840 (cont'd)1838 - 39 (cont.)

Soirees:

Mar. 13 - R. Addams - On the Liquefaction and Solidification of Carboic Acid.

Mar. 27 - H. Wilkinson - On Archery and the Warlike Machines of the Ancients.

April 10 - E.W. Brayley - On Photogenic Drawing.

April 24 - R. Addams - On the Electromagnetic Telegraph.

1839 - 40

J. Lindley - On Botany - 6.

T. Rymer Jones - On the Structure and Habits of the Lower Animals - 8.

C.C. Clark - On the British Poets (cont.) - 4.

W.T. Brande - On the Chemistry of Light and Heat - 6.

E.W. Brayley - On Igneous Geology - 4.

R. Addams - On Frictional and Voltaic Electricity - 6.

V. Novello - On Music - 6.

H. Moseley - On the Economy of Material in Construction and of Power in
Machinery - 6.

M. Truman - On Physiology - 4.

Soirees:

Jan. 8 - J.T. Cooper - On the Daguerrotype.

Feb. 12 - T. Rymer Jones - On the Instincts and Organisations of the Lower
Animals.

Mar. 11 - G. Catlin - On the Manners and Customs of the North American Indians.

April 8 - F. Hobler(jun.) - On the Coins of the Etruscans and Romans.

List of lectures and soirees, 1840 - 1850.1840 - 41.

T. Rymer Jones - On the organisation and habits of the higher - 8.

W. Berry - On Heraldry - 3.

Dr. R. Vaughan - On the Antiquities of Athens - 3.

S. Solly - On the Physiology of the External Senses - 6.

T.J. Serle - On the Drama - 6.

E. Taylor - On English Dramatic Music. - 6.

J. Tennant - On Mineralogy - 4.

J.F. Daniell - On Voltaic Electricity - 6.

Soirees:

Jan 20 - W.R. Grove - On a Powerful Voltaic Combination (Grove's battery).

Feb. 17 - E.W. Brayley - On the Geology of the Moon.

Mar. 17 - J.F. Goddard - On the Photographic Likeness Taken by Woolcott's

Reflecting Apparatus.

April 21 - J.S. Buckingham - Reminiscences of a Tour Through Canada.

1841 - 42.

W.R. Grove - On Magnetism - 4.

E.W. Brayley - On Meteorology - 4.

E. Cowper - On Manufactures - 6. (Papermaking; cotton spinning; weaving;

calico-printing; pottery.

R. Vaughan - On the Antiquities of Rome - 3.

W.R. Grove - On the Physical Elements of the Ancient Philosophers - 4.

B.R. Haydon - On Painting and the Fine Arts - 6.

H.J. Gauntlett - On Church and Chamber Music - 6.

D.T. Ansted - On the Fossil Remains of Extinct Animals - 6.

J. Williams - On Numismatics - 4.

J.S. Buckingham - On the Northern and Atlantic States of America - 4.

C.C. Clark - On the Subordinate Characters in Shakespeare's Plays - 4.

Lectures, 1840 - 1850, (cont'd)1841 - 42 (cont.)

Soirees:

Jan.19 - W.R. Grove - On the Progress of Science since the Building of the
London Institution. (This lecture was printed).

Feb.16 - R. Church - On Pretenders to Divine Magic in the First Century.

Mar.16 - G.A. Mantell - On Fossil and Recent Corals.

April 20 - W.R. Grove - On the Electrotpe.

1842 - 43.

W.R. Grove - On Light - 4.

B.R. Haydon - On the Fine Arts - 6.

E. Cowper - On Manufacturing Art and Machinery - 4.

W.R. Grove - On Attraction - 4 (juvenile course).

R.H. Gould - On American Literature - 2.

E. Taylor - On the German School of Music - 6.

R.D. Grainger - On the Nervous System in the Animal Kingdom - 6.

C.C. Clark - On the Subordinate Characters in Shakespeare's Plays - 4.

(2nd series).

R. Addams - On Mechanics - 6.

J.S. Buckingham - On the Southern and Western States - 4.

Soirees:

Jan.18 W.R. Grove - On Some Discoveries in Physical Science during the past
year.

Feb.15 - S. Solly - On the Mechanism of the Human Foot.

Mar.15 - E.W. Brayley - On the Milky Way as the Place in the Heavens of the
Sun and the Earth.

April 19 - M. Truman - On the Varieties of Substances used as Food by the
Human Race.

Lectures, 1840 - 1850, (cont'd)1843 - 44.

W.R. Grove - On the Correlation of Physical Forces - 6. (This course was
printed).

R.D. Grainger - On the Functions of Organic Life in the Animal Kingdom - 6.

R.H. Gould - On American Literature - 2.

R. Addams - On the Philosophy of a Candle and Artificial Light - 2 (substitute
for 2 lectures by W.R. Grove.)

G. Fownes - On the Chemistry of Vegetable Life - 6.

J. Tennant - On Gems and Stones used in Jewellery - 2.

J.S. Buckingham - On a Voyage from England to the Mediterranean - 4.

H.J. Gauntlett - On the Ballads and Lyrical Music of Great Britain - 6

E. Cowper - On Machinery - 6. (Railway machinery - clocks, watches and
chronometers, signals and telegraphs.)

C.C. Clark - On the Subordinate Characters in the Plays of Shakespeare
(3rd series). - 4.

B.R. Haydon - On the Fine Arts - 4.

Soirees:

Jan.17 - W.R. Grove - On Discoveries in Physical Science during the Past Year.

Feb.21 - W.T. Brande - On Some Anomalous Cases of Chemical Action.

Mar.20 - T.Bell - On the Evidences of Economy as Exhibited in the Variations
of Structure in Different Groups of Animals.

April 17 - W. Carpmael - on the Use of Indian-rubber in Various Manufactures.

1844 - 45.

W.R. Grove - On the History and Philosophy of Electricity - 8.

G.A. Mantell - On Geology and Palaeontology - 6.

J. Wallis - On Astronomy - 6.

G. Fownes - On the General Principles of Chemical Philosophy - 6.

E.W. Brayley - On Meteorology and the Atmosphere - 4.

R.D. Grainger - On the Nutritive and Mechanical Functions - 6.

Lectures, 1840 - 1850 (cont'd)1844 - 45 (cont.)

C.C. Clark - On the Subordinate Characters in Shakespeare (conclusion) - 4.

H.R. Bishop - On the Lyric Drama or Opera - 6.

E. Forbes - On Systematic Botany - 6.

Soirees:

Jan.8 W.R. Grove - On the Discoveries of Physical Science during the Past
Year.

Feb.12 - G.A. Mantell - On Some of the Phenomena of the Nervous System.

Mar.12 - W. Tite - On the Buildings for the Meetings of Merchants called
'Exchanges'.

April 9 - W. Scoresby - Illustrations of Magnetic Principles and Phenomena.

1845 - 46.

W.R. Grove - On the Solid, Liquid and Gaseous States of Matter - 6.

R. Westacott - On Sculpture - 6.

R.D. Grainger - On the Physiology of the External Senses - 6.

W.B. Carpenter - On the Microscope - 6.

C.C. Clark - On the Comic Writers of England - 4.

R. Hunt - On the Chemical Agencies of the Solar Rays - 4.

E. Cowper - On Certain Applications of Mechanics and Manufactures - 4.

(Iron and brass founding, suspension bridges, self-registering
instruments, supply of towns with water.)

E.W. Brayley - On Recent Telescopic Observations of the Nebulae and Clusters
of Stars.(lecture in substitution of 2nd lecture of Mr. Cowper's
course).

H.R. Bishop - On the Secular Music of the 17th and 18th centuries - 6.

E. Forbes - On the Geographical and Geological Distribution of Organised
Beings - 6.

Lectures, 1840 - 1850 (cont'd).1845 - 46 (cont.)

Soirees:

Jan.21 - W.R. Grove - On the Progress of Physical Science.

Feb.18 - E. Solly - On the Potato Blight.

Mar.18 - R.D. Grainger - On the Unhealthiness of Towns, its Causes and
Remedies.

April 15 - E. Cowper - On Self-registering Instruments.

1846 - 47

R.E. Grant - On the Cold-blooded Classes of the Vertebrate Animals - 6.

E. Solly - On the Chemistry of the Metals - 6.

E.W. Brayley - On the Geology of the English Lake District - 2.

E. Clarkson - On Ancient Egypt - 3.

F. Howard - On the Fine Arts -4.

C.C. Clark - On the Comic Writers of England (2nd series) - 4.

L. Playfair - On Organic Chemistry in Connection with Animal Life - 6.

T.L. Donaldson - On Architecture - 4.

R.D. Grainger - On the Organisation of Animals - 6.

H.R. Bishop - On the Music of his Own Times - 6.

Soirees:

Jan.13 - W.R. Grove - On Some Researches made in the Laboratory of the London
Institution during the past year.

Feb.10 - R. Potter - On Planetary Perturbations and the Discovery of the
New Planet.

Mar.10 - A. Smee - On the Ravages of the 'Aphis Vastator'.

April 14 - W. Carpmael - On the Construction and Use of Printing Surfaces.

Lectures, 1840 - 1850 (cont'd)1847 - 48.

W.B. Carpenter - On the Habits and Instincts of Animals - 6.

E. Solly - On the Chemistry of the Non-Metallic Combustible Elements - 6.

R. Westmacott - On Sculpture - 6.

R. Hunt - On Mining in the British Isles - 6.

C.C.Clark - On the Comic Writers of England (3rd series) - 4.

R. Addams - On Accoustics - 4.

E.W. Brayley - On Mineralogy - 4.

A. Smee - On the Phenomena of Vision - 2.

H.J. Lincoln - On Music - 6.

E. Cowper - On Manufacturing Art (Steam navigation; carving machinery used
in the decoration of the Houses of Parliament; latest improvements
in electric telegraph) - 4.

Jan.12 - W.R. Grove - On Deflagrating and Explosive Compounds.

Feb.9 - G.A. Mantell - On the Extinct Ostrich-Like Birds of New Zealand.

Mar.8 - A. Pellatt - On the Processes and Curiosities of the Glass-Manufacture.

April 12 - W. Carpmael - On Gutta-Percha and its Manufacture.

1848 - 49

J. Wallis - On Gravitation and the Tides - 3.

W.B. Carpenter - On Vegetable Physiology - 4.

E.W. Brayley - On Mineralogy - 4.

E.V. Rippingille - On the Arts of Design - 6.

H.J. Lincoln - On Modern Classical Music - 6.

C.C. Clark - On the Comic Writers of England (concluding series) - 4.

B. Powell - On Cometary Astronomy - 4.

W.A. Millier - On Applied Chemistry - 6.

E. Cowper - On Manufacturing Art (making of large telescopes: manufactures in
papier-mache, etc.; engraving and printing machines; stamping

Lectures, 1840 - 1850 (cont'd)1848 - 49 (cont.)

and shaping of metal work.) - 4.

Soirees:

Jan.10 - G.A. Mantell - On the Fossil Remains of Extinct Reptiles.

Feb.14 - S.H. Ward - On the Varieties of the Human Race .

Mar.14 - R.N. Wornum - On the Decorative Arts of the Ancient Egyptians.

April 11 - A. Smee - On Electro-Biology.

1849 - 1850.

W.B. Carpenter - On Palaeontology (Swiney's Lectures, 1st course)* - 12.

H. Wilkin - On Perspective and Drawing - 4.

G. Harvey - On North America (History, resources, scenery, north of Virginia,
including Canada) - 6.

J. Lindley - On the Theory of Horticulture - 6.

W.R. Bexfield - On the English Composers of Music - 6.

E.W. Brayley - On the Natural History of Peat - 2.

W.A. Miller - On Chemical Affinity; and Some circumstances which Modify it - 6.

B. Powell - On Sidereal Astronomy - 6.

S. Sidney - On the Great Exhibition of Industry - 1.

Soirees:

Jan.9 - W.R. Grove - On Some Recent improvements in Physical Science.

Feb.6 - On Arctic Voyages.

Mar.13 - E. Cowper - On the Construction of the Conway and Britannia tubular
bridges.

April 10 - T. Redwood - On the Universal Influence of Magnetism.

* The Swiney Lectures were endowed by George Swiney (1786? - 1844), a notable eccentric. He left £5,000 for the delivery of lectures on geology, the lectures to be an Edinburgh M.D. They were delivered to various places besides the London Institution, including the Royal Institution.

Lectures, 1850 - 1870.1850 - 51.

W.B. Carpenter - On Palaeontology (Swiney Lectures, 2nd course) - 12

E. Trotman - On the History of Architecture - 4.

E.W. Brayley - On Metalliferous Deposits - 2.

W.H. Monk - On Ecclesiastical Music - 6.

T. Redwood - On Air and Water - 6.

E. Cowper - On Manufactures and Construction (lighthouses, locks and fastenings;
Manufacture of Swords, Guns and Cannon.) - 4.

B. Powell - On Planetary Astronomy - 6 (lecture followed by demonstration
of Foucault's pendulum by J.H. Bess, Visitor.)

C.C. Clark - On the Contrasted Characters of Shakespeare's plays - 4.

Soirees:

Jan.8 - E. Cowper - On the Mechanical Construction of the Building for the
Great Exhibition of Industry.

Feb.12 - W.A. Miller - On the Magnetism of Oxygen.

Mar.12 - C. Blair Leighton - On Lithographic Drawing and Printing.

April 9 - G.A. Mantell - On the Extinction of Animals in Relation to Existing
Remains in New Zealand.

1851 - 52

R. Hunt - On the Application of Science to Art and Manufactures, as illustrated
in the Great Exhibition - 6.

J. Lindley - On Botany and Winter-Gardens - 6.

W.H. Monk - On Vocal Part-Music - 6.

T. Redwood - On the Chemistry of the Non-Metallic Elements - 4.

D.W. Mitchell - On the Habits of Reptiles, Birds and Mammals - 6.

R. Walker - On Light and Colours - 6.

B. Powell - On Physical Astronomy - 6.

Lectures, 1850 - 1870 (cont'd)1851 - 52 (cont.)

E. Cowper - On Manufactures and Construction (On the Manufacture of Hempden and Wire Rope) - 1. (This should have been a course of 4 lectures, but Cowper died before its completion. Lectures by Brayley and Hawkins were substituted.)

E.W. Brayley - On the Law of Storms - 1 (substitute.)

C.W. Hawkins - On Food and Raiment as illustrated in the Great Exhibition - 1.
(substitute)

Soirees:

Jan.14 - J. Ryan - On the Chev. Clausen's Process for Preparing Flax.

Feb.11 - W.A. Miller - On the Supply of Water to the Metropolis.

Mar.10 - H.H. White - On the Microscope.

April 14 - J. Adamson - On the Physical Peculiarities of the Cape of Good Hope.

1852 - 53.

W.B. Carpenter - On the Physiology of the Nervous Systems - 6.

J. Adamson - On the Relations of Man to External Nature - 5.

E.W. Brayley - On Physical Geography - 4.

W. Scoresby - On Whales, the Whale Fishery and the Arctic Regions - 4.

L. Playfair - On the Dependence of Industry on Science - 6.

W.R. Bexfield - On the Present State of Music in England - 6.

C.V. Walker - On Sound - 4.

J. Coe - On Printing - 3.

Soirees:

Dec.22 - W.R. Grove - On the Recent Progress of Molecular Philosophy.

Jan.19 - R. Boyle - On the Philology of the English Language.

Feb.16 - E.A. Inglefield - On His Late Voyage to the Arctic Seas.

Mar.15 - J. Tyndall - On the Transmission of Light Through Bodies.

April 19 - C.H. Smith - On the Past and Present Boundary of the Thames at London.

Lectures, 1850 - 1870 (cont'd)1853 - 54

W.B. Carpenter - On Involuntary Movements Resulting from Mental States - 2.

F. Warren - On the Cotton Trade and Manufacture - 4.

J. Phillips - On the Philosophy of Geology - 6.

T.A. Malone - On Actino-Chemistry - 4.

A.W. Hoffmann - On Organic Chemistry - 6.

J. Tyndall - On Magnetism and Electricity - 6.

W.H. Monk - On Chamber Music - 6.

C.C. Clark - On Four of the Great Novel Writers of Europe - 4.

Educational Lectures:

T.A. Malone - On Elementary Chemistry - 12.

M.T. Masters - On Elementary Biology - 12.

E.W. Brayley - On Physical Geography - 12.

Soirees:

Dec.21 - E.A. Inglefield - On the Result of the Late Expedition to the Arctic
Seas.

Jan.18 - G.H. Jackson - On Pompeii.

Feb.15 - E.W. Brayley - On the Effects of the Total Eclipse of the Sun in 1851.

Mar.15 - J. Connolly - On the Past and Present Treatment and Conditions of
the Insane.

April 19 - A. Smee - On the Stereoscope and Binocular Perspective and Their
Application to Photography, Drawing and Painting.

1854 - 55.

Edwin Lankester - On the Physiology of Nutrition - 8.

W.B. Carpenter - On Mental Physiology - 4.

A.W. Hoffman - Outlines of the Chemical History of the Non-Metallic Elements - 6.

C.C. Clark - On Shakespeare's Philosophers and Jesters - 4.

T.H. Huxley - On the General Laws of Life and the Leading Points in the

Lectures, 1850 - 1870 (cont'd)1854 - 55 (cont.)

Structure, Production and Forms of Living Beings - 6.

R. Grant - On Astronomy with Reference to the Most Recent Discoveries in
the Science - 6.

Richard Herring - On Paper and Paper-Making, Ancient and Modern - 2.

John Ella - On the Power of Music as Exemplified in Depicting Scenes of
Passions, Sentiment and Character; or as Imitative, Descriptive,
National, etc. - 6.

Educational Lectures:

Introductory discourse by A. Smee on the objects and advantages of the
educational courses connected with the London Institution.

R. Bentley - On the Vegetative Organs of Plants - 10.

T. Rymer Jones - The Natural History of the Animal Creation - 10

E.W. Brayley - On Physical Geography - 5.

T.A. Malone - On the Characteristic Properties of Certain Elements, Chiefly
The Metals - 20

E.W. Brayley - On Geology and Palaeontology - 10

1855 - 56.

R.E. Grant - Palaezoology. or the Natural History of Extinct Animals - 12

(Swiney Lectures, second series)

R.R.R. Moore - Introductory Travers Lecture, 21 May 1856.

Henry Creswicke Rawlinson - On Recent Discoveries Relating to the Cuneiform
Inscriptions in Assyria and Babylonia. (A series of
lectures, but it is not known how many.)

No further information appears to be available on the lectures given during
this season.

1856 - 57.

R.E. Grant - On the Natural History of Extinct Animals - 12 (Swiney lectures)

J. Tyndall - On Light - 6.

J.N. Hearder - On Voltaic Electricity - 2.

T.N. Burr - The History and Instruments of the Royal Observatory at
Greenwich - 4.

In addition, there were lectures on organic chemistry and two courses, by
Rev. Henry Christmas and Rev. Charles Boutell on antiquarian subjects.

Soirees:

Dec.17 - W.R. Grove - On the Relation of the Movement of Particles to that
of Masses.

Jan.21 - W. Tite - On Some of the Most Characteristic Features of Illuminated
Manuscripts from the 8th to the 18th Century.

Feb.18 - A. Smee - On the Monogenesis of Physical Forces.

Mar.18 - J.P. Cassiot - On the Source of Power which is Utilised in the
Practical Application of Voltaic Electricity.

1857 - 58.

F.A. Abel - On the Materials and Products of Military Manufactures.

G.R. Burnell - On Bridge Building as Applied to Intercommunication Between
Towns, and the Supply of Water.

G.H. Makins - On the Assaying of the Precious Metals.

William Sterndale Bennett - On Music - 4.

J. Tyndall - On Light - 6.

A. Bath-Power - The Principles of Natural Philosophy - 6.

E. Lankester - On the Practical and Scientific Uses of the Microscope - 6.

Soirees:

W. Tite - On the Life and Times of Horace, Illustrated by his Works.

Cyril C. Graham - On His Exploration in the Desert of the Hauran and his

Lectures 1850 - 1870 (cont'd)1857 - 58 (cont'd)

Discovery of the Remains of 37 Cities.

Educational lectures:

10 lectures on conchology and the mollusca, the remainder being continuations of former courses on chemistry, botany and mineralogy. In addition, T.A. Malone had given nearly 40 practical chemistry lessons.

1858 - 59

Edward Frankland - On the Air and Water of Towns - 6.

G. Macdonald - On the Poetry of the 16th Century.

G. Sharp, jun. - On Early Christian Art.

C.W. Hastings - Travers Lectures on Commercial Law - 2.

J. Tyndall - On Light.

T.H. Huxley - Principles of Biology, or the Science of Life - 6.

R. Bentley - On the Vegetable Food of Man - 6.

H. Christmas - Historical Dramas of Shakespeare - 6.

John Ella - The Art of Instrumentation in Chamber and Orchestral Music.

Soirees:

P.M. Holden - Selected Readings from Macbeth.

Educational lectures: 35 in all on chemistry, natural history, meteorology and terrestrial physics.

1859 - 60.

J. Tyndall - On the Radiation and Absorption of Heat - 6.

Joseph Towne - On the Organs and Phenomena of the Senses, Intellectual Powers and Memory - 4.

Josiah Pittman - On the Results of the Use of Music in Divine Worship, and their Influence on the Art in General - 5.

F.W. Pavy - On Experimental Physiology - 6.

Henry Christmas - On Eminent Personages in English History, living between 1640 and 1660 - 6.

Lectures, 1850 - 1870 (cont'd)1859 - 60 (cont'd)

G.W. Hastings - On Commercial Law - 2 (Travers testimonial)

Educational lectures:

E.W. Brayley - On the Physical History, Structure and Materials of the Earth

- 8.

T.A. Malone - On Certain Principles of Vegetable and Animal Chemistry and

their Application to the Arts and Purposes of Life - 18

T. Spencer Cobbold - On the Structure and Habits of the Mammalia - 10

Robert Bentley - On the Structure and Functions of the Nutritive Organs of

Plants - 10

Soirees:

Dec.21 - Richard Owen - The Restoration and Succession of Extinct Animals.

Jan.18 - The Recent Voyage of 'The Fox' in search of Sir John Franklin.

Feb.22 - John Marshall, F.R.S. - The Human Form Considered as an Object of Art.

Mar.21. - Robert Mushet - The Coinage of Money Historically Treated.

April 18 - Sir John Bowring, LL.D, F.R.S. - Buddhism and the Religions of

the Chinese.

1860 - 61

E.W. Brayley - On Physical Geology and Geography - 10.

T.A. Malone - On the Principles and Applications of Vegetable and Animal

Chemistry - 15.

Richard Owen - On the Classification and Geographical Distribution of Recent

and Fossil Mammalia - 5.

Edwin Lankester - On the Relations of the Animal Kingdom to the Industry

of Man - 4.

G.W. Hastings - On Commercial Law - 2 (Travers Testimonial)

Josiah Pittman - On the Progress and Power of Music as Exemplified in Lyric

and Dramatic Representations - 5.

Lectures, 1850 - 1870 (cont'd)1860 - 61 (cont'd)

Charles Tomlinson - On the Mechanical Properties of Matter - 10

Robert Bentley - On the Reproductive Organs of Plants and the Principles of
Classification - 10

T. Rupert Jones - On Some of the Results of Microscopical Investigation
Applied to Geology - 3.

Soirees:

Dec.19 - J.C.M. Bellew - Milton: His Life and Poetry.

Jan.16 - R.H. Smith, jun. - The Cartoons of Raphael.

Feb.20 - C. Maurice Davies - The Antigone of Sophocles, from an Original
English Version, with the Choruses of Mendelssohn.

Mar.20 - Alex Doull, R.A. - On the Arms of Precision.

April 17 - P.M. Holden - Shakespeare and his Moral Influences.

1861 - 62

E.W. Brayley - On the Geographical and Geological Distribution of Organised
Beings - 10.

Henry Letheby - On the General Phenomena of Chemical Action and the Laws
Which Govern Them - 10

A. Bath Power - On the Physics of Imponderable Matter; Including the Leading
Phenomena of Magnetism and Electro-Magnetism - 3.

D.J. Macgowen - On the Arts, Manners and Customs of Japan - 3.

G.W. Hastings - On Commercial Law - 2 (Travers Testimonial)

C.M. Davies - On the Grecian Drama - 3.

R. Bentley - On the Classification, Properties and Uses of Plants - 10.

Frederick Field - On the 7 Metals of the Ancients; their Chemical History
and Applications - 6.

Josiah Pittman - On the Instrumental Music of the Opera and its Influence
on Vocal Music - 4.

Lectures 1850 - 1870 (cont'd)1861 - 62 (cont'd)

Richard Owen - On Birds - 4.

Soirees:

Dec.16 - postponed because of Prince Albert's death.

Jan.15 - P.M. Holden - Thoughts on the Character of Hamlet.

Feb.19 - B. Waterhouse Hawkins - On the Natural History of the Gorilla and
Other Monkeys as Compared and Contrasted
with Man.

Mar.19 - W.B. Carpenter - On Binocular Vision, the Stereoscope and the
Pseudoscope.

April 16 - James Dafforne - On the Advantages of Art Education.

1862 - 63.

E.W. Brayley - On the Operation of Heat in the Production of Geographical
and Geological Phenomena; with reference principally to those
of volcanoes and earthquakes - 6.

F. Field - On the Chemistry of the Non-Metallic Elements - 15.

Richard Owen - On the Class Reptilia - 4.

Shirley Brooks - On the House of Commons, Horace Walpole, and Modern Satire
- 3.

Richard Westmacott - On Sculpture - 4.

G.W. Hastings - On Commercial Law - 2 (Travers Testimonial)

Charles Carter Black - On the Zoology of the Warm-Blooded Vertebrates - 6.

R. Bentley - On Economic Botany: or Vegetable Substances used for Food and
in the Arts, Manufactures and Medicine - 10.

J. Pittman - On the Opera en Comedie as distinguished from the Opera Seria,
or Grand Opera - 4.

Lectures, 1850 - 1870 (cont'd)1862 - 63. (cont'd)

Soirees:

Dec.17 - Robin Allen - On the Fine Arts in the International Exhibition.

Jan.21 - Richard Owen - On the Feathered Fossil, Archeopteryx Macrurus.

Feb.11 - T.J. Rowsell, M.A. - On Alfred Tennyson's "Idylls of the King".

Mar.18 - James Glaisher, F.R.S. - On His Ascents in a Balloon to a Greater
Elevation than had been previously attained.

1863 - 64.

J.A. Wanklyn - On the Principles and Applications of Organic Chemistry - 15.

H. Christmas - On English Costumes from the Anglo-Saxon Period to the Reign
of King Charles II - 4.

J. Dafforne - On British Art and its Social Influences - 2.

R. Owen - On the Classification, Organisation and Fossil Remains of Fishes - 4.

E.W. Brayley - On the Nature and Constitution of the Sun - 1.

John Young - On Commercial Law - 2 (Travers Testimonial)

Robert Bentley - On Economic Botany - 10

W. Sterndale Bennett - On the Music for the Theatre - 4.

Henry Enfield Roscoe - On Prismatic and Solar Chemistry - 3.

E.W. Brayley - On Astronomical Physics; and on the Planets considered as
Worlds - 8.

Francis T. Buckland - On the Artificial Breeding of Fish and other Curiosities
of Natural History - 3.

Soirees:

Dec.16 - Robin Allen - On the Construction of Light-Houses; as the Means of
Aiding Navigation and Averting Shipwreck. -

Jan.20 - Charles Tilstone Beke - On the Sources of the Nile (This lecture
printed)

Feb.17 - T.J. Rowsell - On Byron.

Lectures, 1850 - 1870 (cont'd)1863 - 64 (cont'd)

Mar.16 - B. Waterhouse Hawkins - On the Age of Dragons in Britain; being
 an enquiry how far the legends, fables and figures of dragons are founded
 on facts.

Also given: a report by Wanklyn on researches on hexylic compounds done in
 the L.I. laboratory.

1864 - 65.

No formal list available.

Soirees:

Robin Allen - On the Progress of Navigation.

William Huggins - On the Nature of the Stars and Nebulae as made known by
 their Spectra.

1865 - 66.

Charles T. Newton - On the History of Ancient Art - 3.

William Holmes - On the Crusades; on Joan of Arc; on Dante - 3.

William Odling - On Some Laws of Chemical Combination - 2.

Edwin Lankester - On the Laws of Life in Relation to the Health of the People - 3

G. Carey Foster - On Accoustics, with Special Reference to Recent Experiments
 and Discoveries - 4.

Alfred R. Wallace - On the Natural History of the Malay Archipelago - 3.

J.A. Wanklyn - On Chemistry - 8.

William Pole - On Architectural Engineering, esp. the construction of
 bridges - 3.

W. Sparrow Simpson - On Music: Handel; Mendelssohn; cathedral composers -

R. Bentley - On Botany: the Reproductive Organs of Flowering Plants and the
 principles of classification - 10

George Rolleston - On the Distribution of Species and the Unity of the Human
 Race - 3.

Lectures, 1850 - 1870 (cont'd)

1865 - 66 (cont'd)

John Young - On Commercial Law - 2 (Travers Testimonial).

Robin Allen - On the English Female Poets - 4.

Soirees:

The annual report does not give the lecture subjects for the first two soirees but says that they were "professional".

Feb.21 - S.W. Baker - An Account of his Recent Exploration of the Nile Basin.

Mar.21 - John Lubbock - Transformations of Insects.

1866 - 67.

Fleeming Jenkin - On the Atlantic Telegraph Cables and on the Prospects of
Electric Telegraphy - 3.

B.W. Hawkins - On the External Form of Animals and on the Structure of Limbs
Suitable to the Conditions of Earth, Air and Water - 3.

George Scharf - On English Historical Portraits - 4.

A.S. Herschel - On the Laws of Storms - 3.

D.T. Ansted - On the Present Aspect of Geology - 4.

J.A. Wanklyn - On the Chemistry of the Noble Metals - 8.

C.M. Davies - On Wit and Humour, Ancient, Medieval and Modern - 2.

W. Pole - On the Mechanical Structure of the Piano Forte and other Musical
Instruments - 2.

G.A. Macfarren - On the Origin and Development of the Lyrical Drama - 4.

John O. Westwood - On Entomology - 4.

R. Bentley - On Acotyledenous and Monocotyledenous Plants with especial
reference to Ferns and Palms - 10.

Henry Fawcett - How the Commerce of the Country will be affected by National
Education - 2.

Soirees:

- Dec.19 - Frederick Miller, - On the History of the Late War in Germany,
in explanation of the military operations.
- Jan.16 - Charles T. Beke - On Abyssinia and the Abyssinians.
- Feb.20 - C.T. Newton - On the Blacas Collection, recently purchased by the
government for the British Museum.
- Mar.20 - Robin Allen - On Flags and Banners, their History, Heraldry and
Uses.

1867 - 68

- T.H. Huxley - On Some of the Conditions of a Cosmogony - 2.
- Robin Allen - On Some Characteristics of English Prose Literature - 4.
- T. Spencer Cobbold - On Certain Groups of the Invertebrate Animals - 4.
- T.H. Wright - On the History of the Harp and its Music - 2.
- B.W. Hawkins - On the Nature and Form of the Horse as associated with Science
Art and History - 4.
- Hugh Shield - On Commercial Law - 2 (Travers Testimonial)
- J. Beavington Atkinson - On Raphael and Michelangelo, their Works and
Schools - 2.
- C.J. Newton - On the Sepulchral Rites and Tombs, and on the Public Games
of the Ancients - 3.
- G.S. Macfarren - On the Secular Music of England from the earliest times
to the present - 4.
- E.W. Brayley - On the Labours of the Late Earl of Rosse, for the Advancement
of the Science of Astronomy by means of the Telescope - 2.
- E.T. Chapman - On the Chemistry of Metallurgy - 8.
- R. Bentley - On our Common Garden and Wild Plants - 8.
- In addition, lectures were given by Chapman on water analysis.

Lectures, 1850 - 1870 (cont'd)1867 - 68 (cont'd)

Soirees:

Dec.18 - Alexander J. Ellis - On the Pronunciation of English during the
time of Chaucer and Shakespeare.

Jan.15 - E.W. Brayley - On the Periodical Meteors of November.

Feb.19 - A.J. Bernays - On Explosive Compounds.

Mar.20 - Anthony Trollope - On the Science of Government (politics), a
Study for Common People.

1868 - 69

T.H. Wright - On the Music of the Harp - 2.

G. Farrar Rodwell - On Heat - 4.

W. Pole - On Modern Artillery, Iron Fortifications and the Recent Experiments
at Shoeburyness - 2.

Robin Allen - On English Prose Fiction; Novels and Romances - 3.

Hugh Shield - On the Laws of Allegiance and Naturalisation as affecting the
Commercial Intercourse of Nations - 2 (Travers Testimonial)

P.H. Pye-Smith - On the Vertebrate Classes of Animals - 5.

Hyde Clark - On Comparative History: or the examination of the phenomena
common to the history of all nations - 3.

G.A. Macfarren - On Sacred and Secular Art, as exemplified in music - 4.

Henry O'Neil - On Painting - 2.

E.W. Brayley - On the Nature of the Sun, as Recently Investigated by
Astronomers and Spectroscopists and on the Phenomena Attending
its Total Eclipse on 18th Aug.1868 - 2.

R. Bentley - On the Characters of our Common Garden and Wild Plants and the
Natural Orders to Which They Belong - 8.

T.H. Huxley - On Elementary Physical Geography - 12 (educational)

Soirees:

Dec.16 - W.B. Hodgson - The Life and Times of Turgot and the Antecedents of
the French Revolution.

Mar.17 - F.W. Farrar - Scenes from the Life of Napoleon I.

1869 - 70

Frederick Guthrie - On Elementary Physics - 12)	} educational
C.L. Bloxam - On Elementary Chemistry - 12	
R. Bentley - On Elementary Botany - 12	

Robert Kerr - On Architecture, or the Fine Art of Building - 4.

Hugh Shield - On the Commercial Status and Property Rights of Women - 2

(Travers)

G.A. Macfarren - On the Music of Ireland, Scotland, Wales and England - 4.

Henry O'Neil - On the Influence of the Fine Arts - more especially painting -
on Civilisation - 3.

T. Spencer Cobbold - On the More Important Results of Palaeontological
Investigation (Swiney lectures) - 12.

Soirees:

Jan.19 - H.B. Tristram - The Recent Explorations in Jerusalem.

Feb.16 - Tyndall Atkinson - The Literature of Wit and Humour.

Mar.16 - J.G. Waller - Ancient Arms and Armour. (For this lecture Maj.Gen.

Sir Henry Storks, G.C.B. kindly placed at the disposal
of the Institution specimens of ancient armour from
the Tower of London.)

Lectures, 1870 - 71

Educational Lectures:

W. Odling - On Chemical Action - 8.

T.H. Huxley - On the First Principles of Biology - 6.

R.A. Proctor - On Astronomy - 8.

Evening Courses:

W.H. Stone - On the Accoustics of the Orchestra - 2.

John Morris - On Precious Metals and Precious Stones - 2.

W. Matthieu Williams - Count Rumford and his Philosophical Work - 2.

John Ella - On Music, Characteristic and Descriptive - 3.

F.S. Barff - On the Action, Nature and Detection of Poisons - 4.

J.E. Thorold Rogers - On the Colonial Question - 2 (Travers lectures)

R. Bentley - On Economic Botany, with reference to Vegetable Substances
used for Food - 6.

Conversazioni:

Jan.25 - J. Tyndall - On Dust and Disease.

Feb.15 - W.H. Perkin - On Alizarin and Other Colouring Matters.

Mar.15 - Henry Holiday - Stained Glass Aesthetically Considered with Reference
to Modern Art.

April 12 - Tom Hood - Edmund Waller, M.P., poet, courtier, wit, lover and
sinner.

Short descriptive papers read in the library.

1) On the ancient glass in the church of Long Melford, Suffolk - C. Baily.

2) On the Works of the late T.H. Nicholson, painter and sculptor - Edward
Draper.

Lectures, 1871 - 72.

Educational lectures:

T.H. Huxley - On Elementary Physiology - 8.

W. Odling - On Elementary Chemistry - 8.

Lectures, 1871 - 72 (cont'd).

J. Ella - On Elementary Music - 6.*

R. Bentley - On Elementary Botany, with special reference to the classification
of plants - 6.

J.C. Brough - On the Philosophy of Magic - 4. A Holiday Course for Young
People.

* 5 of these lectures were given by Mr. E.J. Hopkins, with an introductory
lecture by Prof. Ella, owing to Ella's ill-health.

Musical Lectures:

Dramatic music - J. Ella - 4.

Thursday evening lectures:

J.H. Gladstone - Michael Faraday, the story of his life.

Harry G. Seeley - The Influence of Geological Phenomena on the Social Life
of the People.

P.L. Simmonds - Science and Commerce Illustrated by the Raw Materials of
our Manufactures - (Travers Lectures)

Tom Hood - The Life and Works of Thomas Hood.

T. Rupert Jones - South Africa and its Diamond Fields.

Alfred W. Bennett - How Plants are Fertilized.

Robert Etheridge, - The Distribution of Coal in the British Isles and its
Probable Duration.

R. Liebrich - The Effect of Certain Faults of Vision on Painting with especial
reference to the Works of Turner and Mulready.

Charles Tomlinson, - Solution and Supersaturation.

H.E. Armstrong - The Artificial Formation of Alcohols from their Elements.

Walter Noel-Hartley - Experimental Evidence against the Spontaneous
Generation of Living Things.

1871 - 72 (cont'd)

Soirees:

W.D. Tegetmeier - The Homing or Carrier Pigeon: its Natural History, Training and Exploits.

Thomas Archer - The Haunts of Old Londoners.

J. Norman Lockyer - The sun.

Richard Burton - Two Year's Gleanings in Syria and Palestine.

F.S. Barff - Colour.

Isabella Glynn (Mrs E.S. Dallas) - Scenes from 'King John' and 'Hamlet'.

Papers read at discussion meetings:

Thomas Piper - Introductory Paper, being a sketch of the L.I.

Hyde Clark - The Necessity for a Minister of Commerce.

Jacob A. Franklin - A Vindication of our Monetary Standard, with an Exposition of its International Relations.

Thomas Adams - The Political Economy of Railways.

Lectures 1872 - 73.

Educational lectures:

W. Rutherford - The Nutrition of the Body - 6.

P.M. Duncan - Physical Geography - 8.

R. Bentley - Elementary Botany - 6.

W.T. Thiselton-Dyer - Fungoid Organisms in their Relation to Mankind - 2.

H.E. Armstrong - Air, Earth, Fire and Water - 4. (Holiday course)

Evening lectures:

William Pengelly, - Cavern Researches - 2.

Alfred W. Bennett - On Spontaneous Movements in Plants.

Frederick Field - On the Paraffin Industry.

George Farrar-Rodwell - On Ancient Science.

F.S. Barff - On Fresco and Siliceous Painting - 2.

Robert Scott - On Recent Meteorological Enquiry.
Travers course of 3 lectures.

1872 - 73 (cont'd)

Discussion paper:

Dec. 11th, 1872. Peat as a substitute for coal. Mr. Austin, C.E.

Musical Evenings: Jan. 29th, Mar. 5th, April 16, May 21., illustrated lectures
on music.

Soirees:

Victor Pleinier - On the Song of Roland, a Frankish Epic of the 10th cent.

Second soiree - no topic given. Wed. Mar. 12th.

Third soiree, Wed. May 7th, Prof. W. Clifford lectured.

Lectures 1873 - 74.

Afternoon lectures:

P.M. Duncan - The Geology of the Carboniferous Period and the Formation of
Coal - 4.

W.F. Barrett - Magnetism and Current Electricity - 4.

C.G. Zerffi - The Historic Development of Art - 4.

E.B. Tylor - the Development of Civilisation - 2.

With the exception of Prof. Zerffi's course, each of the above courses was
followed by an examination for prizes.

Prof. Armstrong - On Oxygen and Carbon - 6. Holiday Course.

Evening lectures:

M. Creighton - On Dante - 2.

W.W. Skeat - On the Science of the English Language.

Robert Laing - The Effect of the Crusades on Art, Language and Thought.

J. Ella - Musical Composition and Modern Instrumentation - 4.

A.H. Sayce - Recent Assyrian Discovery.

H. Morley - English Poets of the 19th Cent.

J.W. Hales - Milton's Earlier Poems and Prose Works.

J.W. Hales - Milton's Later Poems, with special reference to 'Samson Agonistes'.

A.V. Dicey - Agent and Principal - 3 (Travers lectures)

Lectures, 1874 - 75.

Afternoon lectures:

H.E. Armstrong - The Life History of Plants and Animals - 6.

Armytage Bakewell - Cremation.

J. Lubbock - British Wild Flowers Considered in Relation to Insects.

D. Ferrier - The Functions of the Brain - 2.

R. Bentley - The Classification of Plants - 4.

W.B. Carpenter - The Animal Life of the Deep Sea.

W.B. Carpenter - The Physical Geography of the Deep Sea.

There were no examinations after these courses.

Evening lectures:

G. Rolleston - The Early Inhabitants of England - 2.

J. Ella - On Music - 3.

G.G. Zerffi - The Grotesque in Indian Art.

G.G. Zerffi - Modern French Art.

B.W. Richardson - The Physiology of Sleep.

Edward A. Freeman - The History and Use of the English Language - 6.

H. Morley - The Inner Thought of Shakespeare's Plays - 3.

3 Travers lectures.

Soirees on Dec. 17 and June 3. Music in the theatre 8 - 9p.m. Evening dress

worn.

1875 - 76.

Afternoon lectures:

H. Morley - The Study of English Literature.

W.B. Carpenter - Human Automatism - 2.

E. Ray Lankester - Blood Red and Leaf Green.

James Bryce - The Early History and Institutions of Iceland.

R. Bentley - Unfermented Beverages - Tea, Coffee, Cocoa.

H.E. Armstrong - On Chemistry - 2.

St. George J. Mivart - Apes.

Lectures, 1875 - 76 (cont'd)

W. Spottiswoode - The Polarization of Light.

D. Ferrier - Sleep and Dreaming.-2

C.M. Tidy - Poisoned Air.

Evening lectures:

J.R. Seeley - The Anti-Napoleonic Revolution of Europe.

J. Ella - Lyrical Music. - 2.

A.H. Sayce - Comparative Mythology and Babylonian Myths.

W. Crookes - The Radiation of Light.

G.C. Brodrick - 1 lecture.

J. Ruskin - 1 lecture.

W.K. Clifford - Sight and What it Tells Us.

Clements R. Markham - Recent Geographical Exploration.

A.J. Ellis - English Dialects.

J.H. Pollen - Art in Domestic Furniture.

E.B. Tylor - Races of Mankind and their Civilisation.

E. Dannreuther - Richard Wagner and the Nibelungen Ring - 2.

Vernon Heath - The Autotype, Woodbury and Other Photographic Processes
and Discoveries.

V. Lovett Cameron - On His Recent African Explorations.

A.R. Wallace - The Colours of Animals and Plants: their causes and uses.

Alfred Tylor - The Invention of Numerals and the Calculating Machine.

Lectures, 1876 - 77.

Afternoon lectures:

T.H. Huxley - Some Recent Additions to our Knowledge of the Pedigree of the
Horse.

R.H. Scott - Weather Knowledge.

James Dewar - Light and the Eye.

W.F. Barrett - The Analogy of Sound and Light.

B.W. Richardson - Health Improvements in Great Cities.

Lectures, 1876 - 77 (cont'd)

E.B. Tylor - The Philosophy of Language.

J. Norman Lockyer - Spectrum Analysis.

H.E. Armstrong - Modern Agriculture - 2.

F.W. Brearey - The Problem of Flight (illustrated by models and flight
experiments)

R. Bentley - Palms.

R. Bentley - Ferns.

Alfred Tylor - Waves and Tides .

W.T. Thiselton-Dyer - Plant Growth and its Present Problems

Evening lectures:

W.B. Carpenter - Mesmerism, Odyism, Table Turning and Spiritualism,
considered Historically and Scientifically - 2.

Clements R. Markham - The Results of the Arctic Expedition.

W.F. Barrett - Sympathetic Vibration.

H. Morley - The History of the English Novel - 2.

J. Ella - On Music - 2.

Sidney Colvin - Giotto's Gospel of Labour.

G. Meredith - The Idea of Comedy.

Arthur Severn - Cloud and Sunshine, by a landscape painter.

W.R.S. Ralston - English Nursery Tales: their Origin and Meaning - 2.

Ernst Pauer - Handel and Bach.

Ernst Pauer - Schubert and Schumann.

W.K. Clifford - Spinoza.

F.J. Furnivall - Shakespeare's Literary Partnerships.

Lectures, 1877 - 78.

Afternoons:

X J. Tyndall - On Certain Microscopic Organisms, their Genesis and Work in
the World.

T.H. Huxley - The Extinct Animals Termed Belemnites and their Ancient and
Modern Allies.

W.R.S. Ralston - a "storytelling".

G.J. Romanes - Further Researches on the Evolution of Nerves.

B.W. Richardson - Health and Education.

H.E. Armstrong - Colours from Coal.

R.S. Ball - Some Additions to our Knowledge of Shooting Stars.

E.J. Reed - The History of the Ironclad.

Francis Palmer - The History of the Torpedo.

H. Maudsley - Hallucinations of the Senses.

W.H. Dallinger - Researches Bearing on the Theory of Spontaneous Generation.

A.C. Ramsay - The Ice Age in Britain.

Francis Darwin - The Analogies of Plant and Animal Life.

R.A. Proctor - The Youth of a Planet.

R.A. Proctor - The Old Age of a Planet.

R. Bentley - The Seed and Germination.

R. Bentley - The Eucalyptus Globulus.

Evenings:

C.R. Markham - Greenland.

W.A. Barrett - Sir Henry Stainer.

W.F. Barrett - The Telephone.

W.F. Barrett - New Views on the Spheroidal State

H. Morley - English Novelists of the 19th cent. - 2

S. Colvin - Olympia and Ancient Greek Athletics.

John Lubbock - lecture.

Edmund Beckett - gravity as a universal force.

Ernst Pauer - The Spirit of the Italian, the French and the German Music.

H.E. Armstrong - Explosives.

W. Crookes - The Radiometer.

Lectures, 1877 - 78 (cont'd)

J. Ella - Chamber Music - 2.

J. Ruskin - The Distinctive Powers of the Art of Sculpture - 2.

G. Rolleston - The History of Some of Our Domesticated Animals.

E.B. Tylor - Growth of Ideas and Customs.

Lectures, 1878 - 79.

T.H. Huxley - The Elements of Psychology.

Francis Darwin - Self-Defence Among Plants.

J.W. Judd - The History of the Formation of the Alps, as illustrating the
Vastness of Geological Time.

W.R.S. Ralston - A "Storytelling".

W.F. Barrett - The Phonograph, Tasimeter, Telephone and other Inventions of
Mr. Edison.

H. Maudsley - Organisation and Moral Feeling.

E.B. Tylor - Good and Bad Etymology.

B.W. Richardson - Health and Recreation.

R.H. Scott - The Birth, Life and Death of a Storm.

Monier Williams - Indian Home Life (illustrated from his Indian Collection)

Francis Palmer - The History of the Ironclad.

H.E. Armstrong - Modern Chemical Theory.

J. Milner Fothergill - The Moral Lessons of Physiology.

H.A. Severn - The Theory of Combustion and History of Artificial Illumination.

R.A. Proctor - Life in Other Worlds.

R. Bentley - The Life of the Plant.

J. Comyns Carr - The Present Tendencies of English Art.

W.H. Flower - Wingless Birds, Fossil and Living.

Frederick Harrison - The Abuse of Books.

H. Morley - The English Stage as it has been.

H. Morley - The English Stage as it is.

Lectures, 1878 - 79 (cont'd)

G. Rolleston - Man's Power of Modifying External Nature.

G. Rolleston - The Fauna and Flora of Prehistoric Periods.

E. Beckett - The Meaning and Origin of Laws of Nature.

W. Boyd Dawkins - Britain in the Later Stone Age.

F.W. Farrar - Jewish Rabbis and the Talmud.

F. Guthrie - Fixed Water.

B. Waterhouse Hawkins - The Age of Dragons.

E.B. Nicholson - English Pronunciation - Its Present Tendencies and Their
Future Results.

Ernst Pauer - English Composers for the Virginal and Harpsichord.

(illustrated instrumentally)

E. Dannreuther - Living Composers for the Pianoforte.

Ebenezer Prout - The Harmonium - Its Nature and Capabilities.

Lectures, 1879 - 80.

Afternoon lectures:

T.H. Huxley - Snakes.

H.R. Haweis - The Origin and Influence of Music.

W. Odling - A Recent Application of Organic Chemistry.

Lord Reay - Social Democracy in Germany.

J. Lubbock - Fruits and Seeds. (Lubbock was unable to give this lecture,
which was replaced by a "storytelling" by W.R.S. Ralston.)

W. Abney - Solar Radiation.

R. Bentley - Epiphytes and Parasites.

J.E.H. Girdon - The Leyden Jar.

E.B. Tylor - The History of Inventions.

H.E. Armstrong - The History of Chlorine.

J.G. Wood - Hibernation, Aestivation and Migration.

Monier Williams - Indian Religious Life.

Lectures, 1879 - 80 (cont'd)

G. Phillips Bevan - Waves and Currents of Industrial Progress.

B.W. Richardson - Health and Dress.

F.I. Palmer - Life-Saving Apparatus.

H.N. Moseley - Hydroid Corals - Their Structure and Pedigree.

Evening lectures:

W. Crookes - Experimental Demonstration of Recent researches in Radiant
Matter.

Walter Severn - The Art of Sketching from Nature, practically illustrated.

W.A. Barrett - Christmas and other Festival Carols (illustrated).

H. Morley - The Future of the English Stage.

W. Boyd-Dawkins - The Man of the Caverns.

Frederic Harrison - A Course of Reading in History.

W.E. Ayrton - The 100,000th of a second.

H.B. Wheatley - Two Centuries of Shakespearian Acting.

H.H. Statham - Elements of Architectural Design.

A.H. Sayce - The History of Writing.

Travers Twiss - lecture.

F. Wedmore - Living English Painters.

E.J. Watherston - The History of Gems.

W.H. Monk - Some Predecessors of Bach and Handel (illustrated)

Ernst Pauer - English Composers for the Pianoforte (illustrated)

Lectures, 1880 - 81.

Afternoon lectures:

Leslie Stephen - The Relation of Morality to Literature.

W. St. Chad Boscawen - 'The Kings of the Hittites' - Their Unburied
Monuments and Civilisation.

E. Ray Lankester - Growth from the Egg.

Andrew Wilson - The Past and Present of the Cuttlefishes.

Lectures, 1880 - 81.

Frederic Harrison - The French Revolution and the Various Histories of it.

W. Huggins - The Photographic Spectra of Stars.

E.B. Tylor - Problems in the History of Civilisation.

Mark Pattison, - The Thing That Might Be

H.S. Maine - Succession to Thrones.

John Lubbock - Fruits and Seeds.

J.E. Hodgson - Art Among the Ancient Greeks.

Justin McCarthy - Ireland.

A.H. Sayce - The Gods of Canaan.

G. Phillips Bevan - The Gold and Silver Mines of the World.

R. Bentley - Fungi.

Evening Lectures:

Lionel S. Beale - The Germination and Propagation of Disease.

Oliver J. Lodge - The Relation Between Electricity and Light.

W.R.S. Ralston - A "Storytelling".

G.A. Storey - The Study of the Beautiful.

H. Morley - Our Living Dramatists.

Henry Blackburn - The Art of Popular Illustration.

W.E. Ayrton - The Production of Electricity.

H.E. Armstrong - The Manufacture of Indigo from Coal.

R.H. Scott - Three Years of Daily Weather Forecasting.

Monier Williams - The Castes and Trades of India.

H.R. Haweis - Violins.

W. de W. Abney - One Aspect of Colour.

J.G. Wood - The Inside of an Insect.

William Morris - The Prospects of Architecture in Modern Civilisation.

W.H. Stone - The Combination of Voices with Instruments (illustrated)

Ernst Pauer - The History of the 'Suite' (illustrated musical lecture)

Lectures, 1881 - 82.

Afternoon lectures:

G.D. Leslie - The Relation of the Artist to his Work.

J.G. Wood. - The Horse's Hoof.

G. Aitchison - Colour as Applied to Architecture.

R.S. Ball - Comets.

W. Boyd Dawkins - Commerce and Trade Routes of Prehistoric Europe (Travers
lecture)

E. Ray Lankester - Scorpions, Terrestrial and Marine.

J.W. Judd - Are There Coalfields Under London?

Frederic Harrison - The Real Value of Mechanical Inventions to Civilisation.

Grant Allen - An English Weed.

H.J. Byron - The Border Line Between Farce and Comedy.

E.B. Tylor - Mythical and Magical Beliefs.

A.H. Sayce - The Gods of Canaan.

James Geikie - The Ancient Glacier Systems of Europe.

F. Seymour Haden - The Elements of Etching.

R. Bentley - Materials Used for Paper.

Evening lectures:

Lionel S. Beale - A Living Particle.

O.J. Lodge - Electricity Versus Smoke.

H.R. Haweis - Mark Twain.

W.A. Barrett - Old English Country Songs.

Henry Morley - The Essay in the 19th Century.

Hubert Herkomer - Familiar Arts.

W.H. Stone - Singing, Speaking and Stammering.

John Radcliff - The Flute.

James Sully - The Causation and Phenomena of Dreams.

John Perry - Spinning Tops.

Lectures, 1881 - 82 (cont'd)

H.E. Armstrong - The Economical Use of Coal-Gas for Heating and Lighting.

W. Sparrow Simpson - The Organist-Composers of St. Paul's Cathedral.

W.E. Ayrton - The Storage of Power.

W.F. Yeames - An Art Lecture.

Alfred Tylor - Roman London.

Ernst Pauer - The Sonata Under Haydn and Mozart.

Lectures, 1882 - 83.

Afternoon lectures:

John Ruskin - Cistercian Architecture.

J. Cotter Morison - Thomas Carlyle.

William Creswick - Shakespeare and Lytton.

J.P. Mahaffy - Tourists and Travelling in the Early Days of the Roman Empire.

Henry Blackburn - Modern Pictorial Art.

James Cotton. - The Races of India.

Frederic Harrison - A Few Words on the XVIIIth Century.

John Macdonell - William Cobbett.

Aubrey Husband - The Physiology of the Brain.

T.G. Bonney - River Valleys of English Lowlands - Their Date and History.

Alfred Tylor - Aesthetics of Nature as Displayed by Plants and Animals.

J.G. Romanes - Starfish.

Frederic Wedmore - Turner and the 'Liber Studiorum'.

R.A. Proctor - The Great Pyramid.

E.B. Tylor - Original and Borrowed Civilisation.

Evening lectures:

Ernst Pauer - Beethoven's Earlier Sonatas.

R.S. Ball - The Recent Transit of Venus.

L. Miall - Some Dominant Forms of Animal Life.

O.J. Lodge - Ether and its Function.

W.F. Barrett - Thought Reading, True and False.

Lectures, 1882 - 83 (cont'd)

H.B. Dixon - Gas-Light.

Henry Morley - English War Poetry.

W.H. Stone - Singing, Physically and Physiologically Considered.

W. Sparrow Simpson - The Anthem.

Robert Kerr. - The Properuse of Modern Classical Architecture.

C.A. Fyffe - Europe Since Napoleon's Fall.

W.E. Ayrton - Electric Lighting and Locomotion - 2.

W.A. Barrett - William Michael Balfe.

H.E. Armstrong - Gas Stoves.

Ernst Pauer - Beethoven's Later Sonatas.

Lectures, 1883 - 84.

Sydney B. Skertchly - The Scientific Study of Man - 6.

I. The Animal - Man.

II. The Fossil - Man.

III. Prehistoric Man.

IV. Races of Man.

V. Mental Powers.

VI. Civilisation: Physical and Intellectual.

These were a combination of afternoon and evening lectures.

Afternoon lectures:

G.J. Romanes - Instinct.

William Wedderburn - The Indian Ryot (sic).

C. Armbruster - The Musical Dramas of Richard Wagner.

J. Rae - The Eskimo and Life Among Them.

H. Seeborn - Arctic Siberia.

W. Creswick - Recitation from Shakespeare and Talfourd.

H.H. Statham - On Ornament.

H. Sidgwick - Results Obtained by the Society for Physical (sic!) Research.

Lectures, 1883 - 84 (cont'd)

John Ruskin - The Storm Cloud of the XIXth Century (given twice)

J. Bryce - An Ideal University.

E.B. Tylor - The Three Sources of History - Records, Monuments and Social
Laws.

Arthur Severn - Beach Studies.

Frederic Harrison - London as a Historical City.

Evening lectures:

W. Green - The High Alps of New Zealand.

G.W. Henslow - The Glaciers of the Alps.

W.H. Flower - Whales.

H.E. Armstrong - Water (juvenile lecture)

Donald MacAlister - How A Bone is Built.

Alfred Tylor - Celtic and Roman Britain.

H. Dixon - The Nature of Explosions.

W.A. Barrett - Mozart's Operatic Works.

S.A. Brooke - The Greatest of the Old English Poets.

N. Lockyer - The Eruption of Kratakoa.

F. Gale - Modern English Sports - Their Use and Abuse.

R.S. Ball - The Doctrine of Evolution Applied to the Solar System.

J.C. Bucknill - The Relation of Madness to Crime.

A. Schuster - The Aurora Borealis.

Ernst Pauer - Romanticism in Music.

Lectures, 1884 - 85.

F.W. Farrar - Art in Schools for the Poor.

F.W. Farrar - The Talmud and its Authors.

W. Benham - The French Revolution - 6.

Frederick Gale - Newspapers from the Time of the Commonwealth Onwards.

Carl Armbruster - The Musical Dramas of Richard Wagner (illustrated).

Lectures, 1884 - 85. (cont'd)

G.J. Romanes - Is the Human Mind of Animal Origin? - 2.

Montague Shearman - The Laws of Carriage: I. Relating to Goods; II Relating to
Passengers. (Travers lectures)

Oliver Lodge - Modern Views of Electricity - 2.

C. Stewart - Sketches of Marine Life - 3.

John Rae - The Great North-West of Canada and its People.

H.H. Statham - Form and Design in Music.

H.H. Statham - Architectural Character and Expression.

Alfred Tylor - The Growth of Trees.

S.J.B. Skertchly - The Geology of the London Streets.

S.J.B. Skertchly - The Geology of the London Suburbs.

Henry Blackburn - Some Pictures of the Year.

John Lubbock - Leaves.

H.B. Wheatley - The Topography of London - 2. (ii) before the Fire,
(ii) after the fire.

G. Massee - New Discoveries in the Motion and Variation of Plants.

P.H. Colomb - Principles of British Defence.

J. Stainer - Psalm Tunes and Hymn Tunes (illustrated).

J. O'Connor Power - A Commercial Code (Travers lecture).

Ernst Pauer - The Pianoforte Composers of Beethoven's Time - 2.

J. Norman Lockyer - The Telescopes of the Future.

Lectures, 1885 - 86.

J.E. Hodgson - The Life and Works of Hogarth.

Carl Armbruster - The Musical Dramas of Richard Wagner - 2 (completing the
series)

W. Mattieu Williams - Science Applied to Cookery.

V.L. Cameron - The Heart of Africa.

W. de W. Abney - Light and the Atmosphere.

Lectures, 1885 - 86 (cont'd)

W.R.S. Ralston - Russian Village Life.

Bram Stoker - Personal Impressions of America.

W.H. Flower - Horses of the Past and Present.

Cattle of the Past and Present.

Edwin Freshfield - Christian Constantinople.

Henry Seebohm - The Migration of Birds.

W.A. Barrett - Charles Dibdin and His Songs for the Sea, The Stage and the
Concert Room. (illustrated)

Stopford A. Brooke - The Charm of Venice.

John Perry - On the Distribution of Electric Power.

- Telepherage, or the Automatic Sending of Things by Electricity.

Frederick Harrison - Paris as a Historical City.

E. Ray Lankester - Charles Darwin and his Theory - 3.

E.A. Freeman - The Nature of Historical Evidence.

Frederick Gale - Travelling, from the days of Elizabeth to the present time.

R.A. Proctor. - New Stars.

- Volcanoes.

J. Cotter Morrison - English Life in the XV Century, as depicted in the

Paston Letters.

W.K. Parker - Birds, Their Structure, Classification and Origin.

R. Bentley - The Life of a Plant.

H.R. Haweis - The Anatomy of Musical Notes.

Ernst Pauer - The Most Celebrated Composers after Beethoven's Time.

Spring lectures, 1866:

Stopford A. Brooke - The Poets of the First Twenty Years of the 19th Century -6.

1) Introductory lecture.

4) Byron

2) Coleridge.

5) Shelley.

3) Wordsworth

6) Keats.

Spring lectures 1886 - 87. (cont'd)

T.G. Bonney - The Making of Mountains - 3.

M. Shearman - Patents, Trademarks and Marine Insurance - 3 (Travers lectures)

Lectures, 1886 - 87

R.S. Ball - The Astronomical Theory of the Great Ice Age - 2.

E. Ray Lankester - The Elements of Biology - 6.

Bram Stoker - Abraham Lincoln.

W.T. Rhys Davids - Buddhism.

Henry Seebohm - Birds' Nests and Eggs.

Eric S. Bruce - War and Ballooning.

Edmund Gosse - Wordsworth versus Pope.

C. Meymott Tidy - Chemical Action - 3 (juvenile).

V.L. Cameron - Urua: Its People Government and Religion.

W.H. Flower - Fins, Wings and Hands.

W.A. Barrett - Old Fashioned English Music.

- The Comic Songs of England - 2.

W. Benham - The Story of the Bastille.

W.B. Richmond - Art in the Past.

- The Future for Art.

Sylvanus P. Thompson - Electric Bells - 2.

R.F. Horton - William the Silent.

Harold B. Dixon - The Lighthouse Experiments at the South Foreland.

C.A. Fyffe - Poland, or the Disappearance of the Unfittest.

John Radcliffe - Musical Instruments.

Andrew Lang - Life in Homer's Days.

Ernst Pauer - The Most Celebrated Composers for the Piano since 1830.

Lectures, 1887 - 88.

H.G. Seeley - The Evolution of Reptiles.

Walter Gardiner - How Plants Protect Themselves.

Andrew Lang - The Wanderings of Puss in Boots.

W.A. Barrett - The Material of Music - 6.

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| 1) characters. | 4) composition. |
| 2) combinations. | 5) colour and calisthenics. |
| 3) contrivances. | 6) cultivation. |

Henry Morley - The Future University of London.

H.R. Haweis - Music, Emotion and Thought.

R.S. Ball - 1) Visible Stars.

2) Invisible Stars.

William Penham - The Ancient Eastern Empire.

- Alexander the Great.

- The Ptolemies.

- The Asmonoeans.

- The Roman Conquest of Judaea.

H.H. Statham - Architectural Mouldings.

Robert H. Scott. - Atlantic and British Weather.

G.J. Romanes - Primitive Natural History.

Henry Blackburn - Pictures of the Year.

H.C. Shuttleworth - Contemporary Novelists.

Carl Armbruster - Historical Development of Music from Bach to Liszt.

E. Ray Lankester - A Struggle for Life.

Edwin Freshfield - Glimpses into the Parochial History of the City of London
as gathered from the records - 2.

Charles Stewart - On Sound Producing Organs in the Animal World.

Ernst Pauer - Characteristic Qualities of the Works Produced by the Great
Composers.

Lectures, 1887 - 88 (cont'd)

Edward Riley - A Generation's Changes in the Manufacture of Iron and Steel.

Lectures, 1888 - 89.

R.S. Ball - Time and Tide: The Romance of Modern Science - 2.

W.E. Ayrton - Electrical Transmission of Power.

William H. Cummings - Handel: Vocal, Instrumental and Pictorial Illustrations.

S.P. Thompson - The Colours of Polarized Light - 2.

S.R. Gardiner - Political Progress in the 17th Century.

Charles Stewart - Life History of Some Plants.

- Life History of Some Animals.

W.W. Hunter - The New Forces in India.

C.M. Tidy - The Story of a Tinder Box. With Experiments. (Christmas course for juveniles.)

Harry Furniss - Art and Artists. With Illustrations.

W.H. Flower - Pygmies.

W. St.Chad. Boscawen - Recent Babylonian Explorations.

Edmund Gosse - The English Novel in the 17th Century.

A.A. Common - Astronomical Photography.

W. Benham - The Times of the Twelve Caesars.

- The Times of the Twelve Apostles.

Armytage Bakewell - Modern Wit.

F.W. Farrar - Society in the Early Centuries (A.D.)

Harry Quilter - Men, Women - and Artists.

Shelford Bilwell - Some Curiosities of Magnetism.

E. Ray Lankester - Darwin versus Lamarck.

J.G. Wood - Ants.

Wyke Bayliss - The Legend of Beauty, or Art as representing the Passions of
Our Lives.

W.H. Dallinger - Recent Studies of Some Forms of Minutest Life.

Lectures, 1888 - 89 (cont'd)

Carl Armbruster - Modern Composers of Classical Song - 2.

(i) Franz Liszt, Johannes Brahms.

(ii) Robert Franz.

C.V. Boys - Soap Bubbles and What May Be Shown With Them.

E.B. Tylor - Marriage Laws - Ancient and Modern.

Henry Blackburn - Algeria and Morocco.

W. Boyd Dawkins - Our Early British Ancestors.

H. Gouraud - The Phonograph.

Ernst Pauer - The Characters of the Great Composers and the Characteristics of
Their Works.

Lectures, 1889 - 90.

C. Hubert H. Parry - Early Italian Cantatas.

R.S. Ball - Shooting Stars.

E. Ray Lankester - Mithridates and the Scorpion.

J.W. Judd - The Growth of Crystals in Rocks.

Henry Power - Recent Works on Moulds and Mildews.

W.W. Skeat - English Spelling and Pronunciation.

Eadweard Muybridge - The Science of Animal Locomotion and its Relation to
Design in Art.

Henry Wallis - Lustre Decoration in Ceramic Art.

S.P. Thompson - The Optical Properties of Gems and Precious Stones.

C.V. Boys - Soap Bubbles and the Forces which Mould Them (Christmas course
for juveniles)

Louis Fagan - Egyptian and Assyrian Marbles in the British Museum.

A.H. Green - Birth and Growth of Worlds.

Philip Magnus - University Education in London.

D. Morris - The Sugar Islands of the West.

R. Meldols - Coal and What We Get From It.

Lectures, 1889 - 90. (cont'd)

J. Lubbock - On the Shapes of Leaves and Cotyledons.

A.W. Rücker - Electrical Forces.

Walter Macfarren - Mendelssohn and his lieder ohne worte.

J.P. Mahaffy - A Visit to Mount Athos.

Aubrey J. Spencer - The Law of Buying and Selling (Travers lecture).

Shelford Ridwell - Electrical Phenomena in Nature.

Aubrey J. Spencer - The Law Affecting Passengers by Railway (Travers lecture)

W.P. Ker - The Poetry of William Dunbar.

Carl Armbruster - Franz Schubert and his successors.

Arnold Mitchell - The Rise of Early English Architecture.

Alfred C. Lyall - The Rise of British Dominion in India.

Henry Blackburn - The Art of Popular Illustration.

B.W. Richardson - The Birth of Great Inventions.

- The First Electrician.

W. Benham - Beginnings of Modern Europe - 4.

Ernst Pauer - Fashion in Music.

The Dean of Winchester - Mediaeval Commerce.

H. Gouraud - The Phonograph.

Lectures, 1890 - 1912.1890 - 91.

Robert S. Ball - An Astronomer's Thoughts about Krakatoa.

John Stainer - Carols, English and Foreign. (Illustrated)

Walter Pater - Prosper Mérimée.

Henry Blackburn - Pictures of the Year (illustrated).

W.H. Corfield - The House We Live In.

Carl Armbruster - Hector Berlioz (illustrated).

C.V. Boys - On the Heat of the Moon and the Stars.

R.K. Douglas - Our Commercial Relations with China (Travers lecture)

Arnold Mitchell - English Architecture of the Middle Age. (illustrated)

R.S. Poole - Alexander and his Successors; Their Influence on Art and Manners.

Vivian Lewis - Rain and Fog (3 lects. Christmas course for juveniles)

J.P. Mahaffy - Herod and Cleopatra.

V.D. Majendie - Explosives and Some of Their Developments and Applications.

Shelford Bidwell - Light and Electricity.

William H. Cummings - The British Orpheus. Henry Purcell. (illustrated)

E.L.S. Horsburgh - Social Questions in the Middle Ages

Sydney J. Hickson - Animal Life an a Coral Reef.

Edmund Gosse - British Ballads.

Norman Moore - The History of Medicine in London.

Whitworth Wallis - Pompeii: the city of the dead. (illustrated)

George Massee - Plant Tendencies Towards Animal Modes of Life.

Henry Power - The Brain; Its Structure and Functions.

J.Scott Keltie - The Partition of Africa.

W.A. Barrett - English Folk Songs (illustrated)

T.W. Rhys Davids - Asoka, the First Emperor of India.

C. Stewart - Hearing, illustrated by types.

Roden Noel - Mrs.E. Barrett-Browning.

Lectures, 1890 - 1912.1890 - 91. (cont'd)

Howard Grubb - The Telescope.

W.F. Weldon - Sea Fishes.

Aubrey J. Spencer - The Laws of Joint Stock Companies (Travers Lecture)

W.M. Conway - Succession of Ideals in the Ancient World.

C. Meymott Tidy - What is a Poison?

Ernst Pauer - Originality in Music (illustrated)

Norman Lockyer - On the Orientation of Some Ancient Temples.

1891 - 92.

M.E. Grant Duff - Some of Our Debts to the East.

W.H. Dallinger - Spiders, Their Work and their Wisdom.

W.A. Knight - Spinoza, the Man and His System.

W. Boyd Dawkins - On the Spread of Commerce in Europe in Prehistoric Times.

Robert Ball - Recent Progress in Astronomy.

T.G. Pinches - The Tower of Babel and Confusion of Tongues (Illustrated)

Edmund Gosse - Ibsen and His Critics.

J.F. Bridge - An Hour With My Mozart Manuscripts (Illustrated)

D. Morris - Tropical Plants and Flowers (Illustrated)

The Dean of Winchester - Winchester Cathedral (Illustrated)

C.V. Boys - Time (3 lects. Christmas course for juveniles)

Ernst Pauer - Judgement of Musical Works (Illustrated)

Silvanus P. Thompson - Complementary and Supplementary Colours (Illustrated)

C.T. Knaus - Some Aspects of the Reign of Terror (Illustrated)

E.B. Tylor - Recent Information as to the Lower Races of Man.

Carl Armbruster - The Wagner Festival Performances at Bayreuth. (Vocal,
instrumental,
and limelight illustrations.)

Arnold Mitchell - The Vaulted Roofs of the Middle Ages. (Illustrated)

Lectures, 1890 - 1912.1891 - 92 (cont'd)

E.B. Poulton - The Methods by Which Animals Conceal Themselves. (Illustrated)

Louis Fagan - Line Engraving, English School. (Illustrated)

Percy Fitzgerald - Recollections of Charles Dickens,

Henry Power - The Movements of the Body and How They Are Accomplished.

William H. Cummings - 19th Century Music (vocal and instrumental illuminations.)

Whitworth Wallis - Wanderings in Sicily, The Island of the Golden Shell.

(Illustrated)

Vivian Lewes - Illuminating Flames. (Illustrated)

G.L. Gomme - Popular Superstitions and Traditions.

Shelford Bidwell - Experimental Meteorology.

Israel Collanz - The Saga of Hamlet.

Henry Blackburn - The Portrait Painters (Illustrated)

F.W. Rudler - The Diamond. (Illustrated)

B. Thompson Lowne - On the Manner in Which a Grub Becomes a Fly.

A.A. Common - The Chief Astronomical Observatories of the World.

E. Hanbury Hankin - Bacteria, Their Function and Nature. (Illustrated)

1892 - 93.

Robert Ball - Auriga. (Illustrated)

Edmund Venables - Lincoln Cathedral (Illustrated)

Henry Power - Respiration in Plants and Animals. (Illustrated)

J. Theodore Bent - The Ruined Cities of Mashonaland. (Illustrated)

B. Bowdler Sharpe - Curiosities of Bird Life. (Illustrated)

C.V. Boys - Photographs of Flying Bullets, etc. (Illustrated)

Edmund Gosse - Reading as a Recreation.

Joseph Barnby - A Plea for Catholicity of Taste in Music. (Illustrated)

Lamorock Flower - Water Supply - Pollution of Water - Drinking Water.

(Illus. Travers lecture.)

Lectures, 1890 - 1912.1892 - 93 (cont'd)

W.H. Dallinger - Ants: A Study of Sociology and Politics Amongst Insects.

(Illustrated)

Arnold Mitchell - Towers and Steeples. (Illustrated).

Vivian Lewes - Combustion: Slow, Rapid and Expensive. (Christmas course).

The Chief Rabbi - Jewish Wit and Humour.

G. Du Maurier - Social Pictorial Satire (Illustrated)

Sylvanus Thompson - Electric Lighting: 1) Generation of Electric Currents.

2) Electric Lamps. 3) Accessories and meters. (Travers

lectures).

E.L.S. Horsburgh - The Spanish Armada. (Illustrated)

J.F. Bridge - Pepy's Diary and its Musical Notes. (Illustrated)

William Benham - The Emperor Justinian and His Times.

Henry Blackburn - The Book of the Future. (Illustrated)

J.J. Harris Teall - The Natural History of Silica. (Illustrated).

A.C. Mackenzie - The Overture. (Illustrated).

Shelford Bidwell - Electricity and Heat. (Illustrated)

T.W. Rhys Davids - The Women in the Buddhist Reformation of the 6th Century B.C.

C. Dickens - 3 Views of the Pathos of Charles Dickens. (Illustrated readings.)

Donald Mackenzie - The Present State of the Morocco Empire. (Illustrated.

Travers lect.)

E.E. Klein - Bacteria: Their Nature and Function.

William H. Cummings - The Rightful Position of England as a Musical Nation

(Illus.)

Lectures, 1890 - 1912.1893 - 94.

Robert Ball - Recent Researches on the Sea. (Illustrated)

F. Byron Jeavons - The Women of Ancient Greece. (Illustrated)

B. Bowdler Sharpe - Birds, Ancient and Modern. (Illustrated)

Carl Armbruster - Two Remarkable Song Writers. (Illustrated)

H.A. Boys - Zante and its Earthquakes. (Illustrated)

J. Sully - The Uses of Humour.

C.V. Boys - When and Why an Electric Spark Oscillates. (Illustrated)

Alfred Austin - The Essentials of Great Poetry.

Arnold Mitchell - Old Buildings and the Story They Tell. (Illustrated)

W.H. Cummings - Canons and Catches. (Illustrated).

W.F.R. Weldon - Crabs. (Illustrated)

H.J. Mackinder - Marco Polo; Columbus; Magellan. (Christmas course for
juveniles, illus.)

William Tallack - Prisons and Criminal Treatment.

W.H. Dallinger - The Pond and its People. A Modern Study of Minute Life and
Beauty. (Illus.)

Wyke Bayliss - Shakespeare in Relation to His Contemporaries in the Fine Arts.

C.F. Binns - Pottery and Porcelain. (Illus.)

C. Stewart - Some Curiosities of Natural History. (Illus)

T. Hodgkin - The Roman Wall in Northumberland. (Illus)

J.F. Bridge - A Talk About the Orchestra. (Illus)

R.W. Frazer - Religions, Mosques and Temples of India. (Illus)

Shelford Bidwell - Some Optical Phenomena. (Illus)

Lewis F. Day - Art About Us.

J.J. Harris Teall - The Life History of a Mountain Range. (Illus.)

George Kennan - Russian Political Exiles. (Illus)

E. Klein - On Cholera (Illus.)

Lectures, 1890 - 1912.1893 - 94 (cont.)

I. Gollanz - English Bards of the Welsh Marches.

Lionel Monckton - Opera: Its Evolution and Present Tendency. (Illus)

Vivian Lewes - The Chemistry of Cleaning. (Illus)

W. Benham - Old Traditions and Memories of our Own Neighbourhood.

Lewis Morris - The Present and Future of Poetry in England.

1894 - 95.

Hubert Herkomer - Sight and Seeing, or Art Tuition.

W.M. Flinders Petrie - Primitive Egypt. (Illus)

D. Morris - Wonder-Working Plants. (Illus)

W. Martin Conway - Climbing in the Himalayas. (Illus)

H.N. Hutchinson - Extinct Monsters. (Illus)

C.V. Boys - The Newtonian Constant of Gravitation, or Weighing the Earth.

(Illus)

Joseph Barnby - Contemporary Music. (Illus)

Edmund Gosse - The Literary Movement of the Century.

Sidney Hichson - The Fauna of Rivers and Lakes. (Illus)

Silvanus P. Thompson - Electric Engines. (Illus)

J.F. Bridge - A Popular Composer of the Olden Times (John Jenkins) (Illus)

Edward Whymper - Twenty Thousand Feet Above the Sea. (Illus)

Charles W. Stubbs - The Ideal Woman of the Poets.

Arnold Mitchell - English Cathedrals. (Christmas course for juveniles, illus)

H.J. Mackinder - The Netherlands, a Geographical survey. (Illus)

A.P. Laurie - Waves of Water and Waves of Light. (Illus)

Wyke Bayliss - The Use of the Supernatural in Art.

Henry Power - Nerves and Nerve Centres in Action. (Illus)

Robert Ball - Comets. (Illus).

H.C. Shuttleworth - Utopias: Ancient and Modern.

R.W. Frazer - Native Life in India. (Illus)

Lectures, 1890 - 1912.1894 - 95 (cont.)

G.F. Geaussant - Musical Education.

Seymour Lucas - The Evolution of an Historical Picture. (Illus)

A. Gordon Salamon - The Germination of Barley .(Illus)

Victor Horsley - Truth and Falsehood as to Electric Currents in the Body.

C.F. Binns - Glass, Antique and Artistic. (Illus)

W. Benham - Dickens' London.

W.H. Cummings - National Song. (Illus)

F. Seymour Haden - Rembrandt and His Works. (Illus)

W.H. Dallinger - The Beautiful as Seen in Minute Nature. (Illus)

Edward E. Klein - Theory and Practice of Protective Inoculations. (Illus)

1895 - 96.

F.E. Weiss - Relation of Ants to Plants. (Illus)

Augustine Birrell - Dr. Johnson.

W. Boyd Dawkins - A Forest Primeval. (Illus)

Edmund Gosse - Robert Louis Stevenson.

Arnold Dolmesch - Old Musical Instruments. (Illus)

F. Carruthers Gould - Sketches in Parliament. (Illus)

Arthur Diosy - The New Far East - The Results of the War Between China and

Japan and their Probable Effects on British Trade. (Travers lect)

Arnold Mitchell - Early Norman Churches. (Illus)

Donald Mackenzie - Present Position of British Protectorates in East Africa.

(Travers lect. illus.)

Vivian Lewes - 3 Great Chemists and Their Work: Priestley, Lavoisier, Davy.

(Christmas course. Illus)

Israel Gollanz - Schoolmasters and Plays.

J.P. Mahaffy - The Macedonians in Egypt.

Jesse Herbert - China and the Chinese.(Travers lect.)

Lectures, 1890 - 1912.1895 - 96 (cont.)

J.A. Fleming - Experiments with Incandescent Lamps.(Illus)

Arnold Mitchell - Medieval building in the 12th Century.

F.W.W. Howell - Unexplored Glaciers of Vatna Jökul.(illus)

H.J. Powell - Mosaics, Ancient and Modern.(Illus)

Edward Matthey - The Campaign of Marengo. (Diagrams and maps)

Carl Armbruster - Two Forgotten Italian Masters: Cherubini and Spontini.

(Illus)

D'Arcy Power - Meals of Our Ancestors.(Illus)

H. Frank Heath - The Stage, from Shakespeare to Irving. (Illus)

Seymour Lucas - Picture Painting.(Illus)

W.B. Richmond - The Decoration of St. Paul's: How it Came About.

John Lubbock - Swiss Scenery.(Illus)

W. Benham - Rambles Through City Churches.

1896 - 97.

W. Knight - The Function of Philosophy at the Present Day.

T. Hodgkin - Ravenna and its Mosaics.(Illus)

D. Morris - Recent Researches in Commercial Fibres.(Travers lect.illus.)

Fred Enoch - Wonders and Romance of Insect Life. (Illus.)

W.S. Lilly - The Mission of Tennyson.

John Milne - Unfelt Movements of the Earth's Crust.(Illus)

I. Zangwill - The Drama as an Artistic Product.

A.A. Kanthack - The Bacteria which We Breathe, Eat and Drink. (Illus)

J.A. Fleming - Rays of Light, New and Old. (Christmas course, illus)

W.H.S. Aubrey - William Hogarth, Historian and Satirist. (Illus)

Frank J. Sawyer - The History of the Dance (With Terpsichorean and Musical
Illustrations)

J.A. Gray - Experiences at the Afghan Court. (Illus)

H.J. Powell - The Art and Craft of Glass Making. (Illus) (Travers lect)

Lectures, 1890 - 1912.1896 - 97. (cont)

C.V. Boys - Capillary Ripples. (Illustrated by experiments)

Joseph Pennel - The Golden Age of English Illustration. (Illus)

Augustine Birrell - John Wesley, Some Aspects of the 18th Century.

G. Vivian Poore - The Dwelling House. (Illus)

Cyril J. Davenport - Decorative Bookbinding from Mediaeval Times. (Travers
lect. illus.)

Arnold Dolmetsch - Italian, French and German Music of 16th, 17th and 18th
Cents. (Illus)

Sydney J. Hickson - The Fauna of the High Seas. (Illus)

H.R. Mill - The Arctic Record. (Illus)

J. Joseph Jacobs - Brer Rabbit and Buddha.

R. Kearton - Peeps into Nature's Secrets. (Illus)

H. Lewis Jones - The History of Röntgen's X-rays and Their Practical Applicat-
ions. (Illus)

W. Benham - Cheapside. (Illus)

1897 - 98.

Arnold Mitchell - Peterborough Cathedral and its Restoration. (Illus)

Vivian Lewes - "Acetylene" (with illustrations)

Whitworth Wallis - the Pre-Raphaelite Art of Sir John Millais, P.R.A.

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of the pictures.)

Silvanus P. Thompson. - Signalling Across Space. (with experiments)

Henry W. Lucy - Parliaments of the Queen..

W. Boyd Dawkins - On the Frontier of History in Britain.

Charles Harding - The Weather Office and its Work. (Illus)

F.G. Edwards. Mendelssohn. (Illus)

Fred Enoch - Insects at Home; Insects at Work; Insects at Meals. (Christmas
course. Illus)

Lectures, 1890 - 1912.1897 - 98 (cont)

F.C. Selous - Travel and Adventure in South Africa. (Illus)

Albert Vandam - An Englishman in Paris.

W.B. Bottomly - Microbes, Friendly and Otherwise. (Illus)

Arnold Dolmetsch - Musical Ornamentation in 16th, 17th and 18th Cents. (Illus)

Edward Whymper - My Scrambles Amongst the Alps. (Illus)

Frederick A. Fox - English Secular Vocal Part-Music. (Illus)

G.B. Howes - The Position of the Mammalia in the Animal Series. (Illus)

R. Kearton - Haunts and Habits of British Birds. (Illus)

Vivian Lewes - Incandescent Gas Lighting. (Illus)

Augustine Birrell - Commercial Aspects of Fraud. 2 lects.

John Milne - Geological Changes Beneath the Ocean. (illus)

W. Martin Conway - The First Crossing of Spitsbergen. (Illus)

W. Law Bros. - Primitive Ireland. (Illus)

W. Benham - St. Paul's Cathedral.

1898 - 99.

F.W. Farrar - Canterbury Cathedral. Illus.

J. Norman Lockyer - The Recent Eclipse. (Illus)

Sydney J. Hickson - Sedentary Animals. (Illus by diagrams)

Hugh Robert Mill - The Story of the Antarctic. (Illus)

William Carruthers - The Plant Friends and Foes of the Farmer.

W. Benham - Richard Posson.

Wyke Bayliss - Art, Contra the World the Flesh and the Devil.

Eric Stuart Bruce - Some Experiments in the Persistence of Vision. (Illus)

Howard Angus Kennedy - The Story of Canada. (Illus)

Josiah Booth - Humour in Classical Music. (Illus).

Charles Stewart - Life Histories of Some Plants and Animals. (Illus)

J.P. Mahaffy - Pitfalls in Education.

Lectures, 1890 - 1912.1898 - 99 (cont).

William J. Russell - How to Produce a Picture on a Photographic Plate in the
Dark. (Illus)

F.W. Rudler - The Record of the Rocks. (Christmas course for juveniles)

R.K. Douglas - The Future of British Trade in China.

Albert Forbes Sieveking - Gardens: Their History and Literature. (Illus)

Shelford Bidwell - Optical Illusions. (Illus)

Frank J. Sawyer - Our National Songs. (Illus)

Walter Raleigh - Lord Chesterfield.

W.F.R. Weldon - Worms.

Henry W. Handcock - Everyday Applications of Electricity. (Practical
Demonstrations)

Edward Arber - Stories from "The Spectator" 1711 - 1712.

W.B. Bottomley - Darwinism. (Illus)

C.W. Pearce - Samuel Wesley: His Life, Times and Compositions. (Illus)

Sidney Lee - Shakespeare in folio. (Illus. by original copies of the first
4 folio editions of Shakespeare's Works in the possession of
the L.I.)

W. Benham - Winchester Cathedral.

W. Ramsay - Recently Discovered Gases of the Atmosphere. (Illus)

W. Benham - St. Alban's Abbey.

1899 - 1900.

W. Boyd Dawkins - The Place of the Welsh in the History of Britain. (Illus)

W.H.S. Aubrey - A Saunter in the By-Ways of Literature.

Henry B. Wheatley - The Tower of London: Fortress, Palace and Prison. (Illus)

George Langley - Music in its Relation to Painting and Poetry. (Illus)

Edward Hull - The Route of the Exodus from Egypt to Palestine. (Illus)

Stuart M. Vines - The Highest Andes. (Illus)

Lectures, 1890 - 1912.1899 - 00 (cont)

W.B. Bottomley - Vegetable Appetites and How Satisfied. (Illus)

Arthur W. Clayden - Thunderstorms. (Illus)

Lewis F. Day - Stained Glass. (Illus)

Frederick A Cox - The Madrigal in Shakespeare's Time. (Vocal illustrations)

Francis Bond - Architecture and National Character. (Illus)

Edward Step - Some Wild Flowers and Their Ways. (Illus)

Andrew Wilson - The Living Body and Its Cell Citizens, (Illus)

Alfred H. Fison - 1)Light and Colour. 2)Colour Mixture and Colour Sensations.

3) Photographs in Natural Colours. 4)Sky Colours and London Fogs. All

lectures illustrated.

J.A. Fleming - Aether and Atoms. (With Experiments)

W. St. Chad Boscawen - Beginnings of Trade and Commerce. (Illus)

E. York Powell - The Future of History.

Alfred Rhodes - Early Days of Beethoven. (Illus)

Walter Crane - The Elements of Linear Expression. (Illus)

J.D. McClure - Shooting Stars. (Illus)

F.G. Aflalo - A Moorish Capital (Illus)

J. Churton Collins - Curiosities of Criticism.

J.S.S. Brame - Modern Explosives (Illus)

John Hart - Some Legal Aspects of Barter and Currency.

Charles Welch - The Ancient Guilds of the City of London. (Illus)

Carl Armbruster - Wagner (Illus)

Grenville A.J. Cole - The Heart of Europe. (Illus)

Silvanus P. Thompson - Electric Locomotion. (Illus)

William Dorling - Oliver Wendell Holmes.

Lectures, 1890 - 1912.

1900 - 01

Lord Avebury - Money and Coins.

W.M. Flinders Petrie - The Rise of Egyptian Civilisation. (Illus)

E. Foxwell - Four Years in the Far East. (Illus)

Robert Ball - The Earth's Beginning. (Illus)

Charles Macpherson - Scottish Songs and Music. (Illus)

Richard Jebb - Macaulay.

Lord Harris - The Presidency of Bombay. (Illus)

Grenville A.J. Cole - The Earth's Earliest Inhabitants. (Illus)

Frederick Lambert - The Caves of Jenolan (Illus)

John Collier - Varying Ideals of Human Beauty. (Illus)

W. Benham - Gillray and His Caricatures. (Illus) - 2 lectures.

Coulson Kernahan - Confessions of a "literary adviser".

J. Bridge - Dramatic Music, from the Miracle Plays to the Masque of 'Comus'.

(Illus)

Silvanus P. Thompson - The Tercentenary of the Science of Electricity. (Illus)

W.B. Bottomley - Flowers: 1) Structure and Colour; 2) Insect Visitors;

3) Unbidden Guests; 4) Place in Nature.

Alex Hill - The Evolution of the Brain. (Illus)

Eric Stuart Bruce - Modern Aeronautics. (Illus)

H.J. Mackinder - The First Ascent of Mount Kenya, Equatorial East Africa.

(Illus)

J.A. Fuller-Maitland - Bach's 48 Preludes and Fugues. (Illus)

H. Elliot Malden - Earthworks and Castles of Early England. (Illus)

R.K. Douglas - The Commercial Aspects of China.

Arthur Diosy - The Economic Future of Japan.

Budgett Meakin - The Moorish Empire. (Illus)

Victor Horsley - The Effect of Alcohol on the Nervous System. (Illus)

Lectures, 1890 - 1912.1900 - 01 (cont).

A.C. Haddon - The Decorative Art of Primitive Peoples. (Illus)

Arnold Mitchell - Mediaeval Scripture. (Illus)

W.H. Cummings - Hatton: Musician and Composer. (Illus)

Fred Enoch - Aquatic Autocrats and Fairies. (Illus)

1901 - 2.

Lord Avebury - On the Senses and Intelligence of Animals. (Illus)

Charles Welch - The Thames - Its Tributaries, Banks and Bridges. (Illus)

Grenville A.J. Cole - The Life-Period of Mountains. (Illus)

John Radcliffe - Pipes and Flutes of all Ages. (Illus)

Silvanus P. Thompson - Optical Properties of Diamonds and Rubies. (Experiments)

Thomas Hodgkin - The Scottish Border - Its Law and Its Poetry.

Charles Stewart - Nourishment and Protection of the Young of Some Animals
(Illus)

Henry Tiedeman - Hungary as a Field for British Enterprise. (Illus)

Arthur W. Clayden - Photographic Study of Clouds. (Illus)

J. Irwin Coates - "Lunar Geography". (Illus)

Francis Bond - Mediaeval Monks and Monasteries. (Illus)

Patrick Manson - Conveyance of Malaria by the Mosquito. (Illus)

G.B. Howes - Recent Work Among the Mollusca. (Illus)

W. St. Chad Boscawen - Recent Discoveries at Susa. (Illus)

Howard Angus Kennedy - The Empire at Work and Play: 1) America; 2) Africa
and Australasia; 3) India and the Far East. (Illus)

Frank T. Bullen - Romance and Reality at Sea. (Illus)

Henry Power - The Heart (Illus).

Frederick Lambert - The Mammoth Cave of Kentucky. (Illus)

F.G. Russell - English Sacred Musicians. (Illus)

F.W. Mott - The Development of the Human Brain as an Organ of Mind. (Illus)

Lectures, 1890 - 1912.1901 - 2 (cont)

G.J. Burch - Colour Vision (Illus)

C.H. Reilly - City Buildings, Old and New. (Illus)

G.F. Emery - Company Promoters in Theory and Practice.

H.F. Gadow - Protection by Shape and Colour in Amphibia and Reptiles. (Illus)

Frederick A. Cox - The Glee in English Music. (Illus)

Edwin Freshfield - Archaeology in London as a Pastime for a Busy Man.

L.R.W. Forrest - The Second City of the Empire. (Illus)

William Ramsay - Inert Gases of the Atmosphere. (Illus)

Carl Armbruster - Schubert, Schumann and Franz. (Illus)

1902 - 3.

Lord Avebury - The Scenery of England and the Causes to which it is due.

(Illus)

W.M. Flinders Petrie - The Earliest Kings of Egypt. (Illus)

W.H.S. Aubrey - Daniel Defoe, publicist and Story Teller.

Robert S. Hall - The Earth's Beginning. (Illus)

W.H. Hadow - Style and Character in Musical Composition. (Illus)

E.T. Reed - Caricature, In and Out of Parliament. (Illus)

J. Rendel Harris - Recently Recovered Early Christian Documents.

A. Smith Woodward - Some Newly Discovered Extinct Animals. (Illus)

J.H. Turner - British Columbia. (Illus) (Travers lect.)

Silvanus P. Thompson - The Magic Mirror. (Illus. by Experiments.)

Richard Kerr - Colour Photography. (Illus)

Wyke Bayliss - The Bogey in the Studio. An Address to lovers of art on vexed
questions of the day.

Josiah Booth - Tone Painting in Song. (Illus)

Henry Norman - Russia of Today. (Illus) (Travers lect.)

Fred J. Melville - Postage Stamps with Stories. (Illus.) (Travers lect.)

Lectures, 1890 - 1912.1902 - 3 (cont)

W. Benham - Old London: 1) Old Houses; 2) Old Churches; 3) Old People. (Illus)

W.H. Dallinger - Recent Studies in the Lives of Spiders. (Illus)

Walter Marshall - The Romance of Architecture. (Illus)

Hillaire Belloc - The City of Paris. (Illus)

Frank J. Sawyer - The Folk Songs of the English Village. (Illus)

W.B. Bottomley - Economic Hopes for Ireland. (Illus) (Travers lect.)

W. Hampson - Liquid Air - (With experiments) (Travers lect.)

E.W. Maunder - The Royal Observatory, Greenwich. (Illus)

John A. Stewart - The Confessions of a Novelist.

W.H.S. Aubrey - Diseases and Doctors in the Olden Times.

C.W. Pearce - The Songs of Schubert and Schumann. (Illus)

Roger E. Fry - The Art of Piero di Cosimo. (Illus)

1903 - 4.

Emilio Olsson - The Argentine: the Land of the Future. (Illus) (Travers lect)

Arthur W. Rucker - the Work and Aims of London University.

E.F. Jacques - The Music of India. (Illus)

J.A.H. Murray - The World of Words and Its Explorers. (Illus)

Frank T. Bullen - The Merchant Service (Illus) (Travers lect.)

Alex Hill - The Brains and Minds of Animals. (Illus)

W.H.S. Aubrey - National and Patriotic Songs. (Illus)

J.D. Rees - Persia and the Persian Gulf. (Illus) (Travers lect.)

William Ramsay - Radium and the Periodic Law in Connection with Recently
Discovered Elements. (Illus)

E.J. Garwood - Volcanoes, with Special Reference to the Recent Eruptions.
(Illus)

J.M. Bacon - Balloons and Flying Machines. (Illus) (Travers lect.)

Arthur Gulston - The Ice-Breaker "Ermack". (Illus) (Travers lect.)

Lectures, 1890 - 1912.1903 - 4 (cont.)

E. Walter Maunder - Mars and its "Canals". (Illus)

A.B. Walkley - Some Aspects of the Modern Stage.

A. Foxton Ferguson - Christmas Songs. (Illus)

William Hampson - 1) Ice; 2) Water; 3) Steam. (Illus) (Christmas course)

H.F. Gadow - Mexico and its Natural History. (Illus)

Robert Hutchinson - The Food of the People.

M.H. Spielmann - British Sculpture of Today. (Illus)

Hans Wessely - Violin Music from the Old Italian Masters to the Modern
Composers (Illus)

Horace Tozer - National Progress of Australia. (Illus) (Travers lect.)

Henry T. Ashby - A Pilgrimage to Classic Shrines on Greece, Asia Minor
and Crete, (Illus)

J.D. McClure - The Measurement of the Heavens. (Illus)

Percy Fitzgerald - Charles Dickens, His Novels and Methods. 2 lects.

Grenville A.J. Cole - The Fringe of the Balkans. (Illus)

1904 - 5.

Lord Avebury - Our Fiscal Policy. (Travers lect.)

Robert Anderson - Crime and Criminals.

Robert K. Douglas - The Present Condition and Probable Future of China.
(Travers)

A.C. Mackenzie - Liszt. (Illus)

Andrew J. Herbertson - The Relation of Occupation to Geographical Conditions
(Illus) (Travers lect.)

H.F.B. Lynch - Armenia (Illus).

Mrs. E. Burton-Brown - Recent Excavations in the Roman forum. (Illus)

Maurice N. Drucquer - Law and Custom of the Stock Exchange. (Travers lect)

Henry A. Miers - The Diamond Mines of Kimberley. (Illus)

Lectures, 1890 - 1912.1904 - 5 (cont).

T.H. Holdich - Tibet (Illus)

Arthur Diòsy - The Probable Results of the Russo-Japanese Conflict as
Affecting Commerce in the Far East. (Travers lect.)

Charles Stuart Rolls - The Development of Motor Traffic. (Illus) (Travers lect.)

George Clausen - A Sketch of the Development of Painting. (Illus)

John South Shedlock - Bird Music. (Illus)

Eric Stuart Bruce - 1)Balloons;2)Airships; 3)Kites and Flying Machines. (Illus)
(?Christmas course.)

Henry Hill - Studies in Spider Life. (Illus)

Frederick A. Cox - The Glee in its Decline. (Illus)

W. Evans Darby - History of International Arbitration.

E. Markham Lee - Dvorak. (Illus)

Hugh Stannus - Architecture from Egypt to Rome. (Illus)

W.H.S. Aubrey - Our American Cousins. (Illus)

Benjamin Kidd - Social Evolution Amongst Social Insects.

Henry Tiedeman - Some Aspects of Russia as She is. (Illus)

M.H. Spielmann - The Wallace Collection. (Illus)

W. Benham - The Literary History of the Bible.

W.E. Ayrton - Energy: American, British and Japanese. (Illus) (Travers lect.)

1905 - 6.

Robert S. Ball - A Cruise with the Commissioners of Irish Lights. (Illus by
original photographs.)

M.H. Spielmann - Art and Humour. (Illus)

W.M. Flinders Petrie - The Egyptians in Sinai. (Illus)

A.C. Mackenzie - Tchaikovsky. (Illus)

Henry Hill - Flies and How They Disappear. (Illus)

Hilaire Belloc - The Oldest Road in England. (Illus)

Lectures, 1890 - 1912.1905 - 6. (cont.)

W.H. White - Submarines. (Illus)

George Henslow - Geographical Botany Interpreted by Direct Response to the
Conditions of Life. (Illus)

Charles Elloit - The Upper Nile. (Illus)

Martin Hume - The Birth of Britain Overseas.

Karl Pearson - Variation in Man and Woman. (Illus)

Edward Tennyson Reed - With Pen, Pencil and a Sense of Humour. (Illus)

Cecil J. Sharp - English Folk Song. (Illus)

Vivian B. Lewes - Our Atmosphere and Its Wonders. (Illus. by experiments).

W. Evans Darby - Shakespeare's "Tempest", a Study in Present Day Problems.

E. Markham Lee - Richard Strauss and His Works. (Illus)

Joseph Guinness Broodbank - Notes on the Port of London. (Illus)

M. Gaster - Russian Broadsides and Illustrated Prints. (Illus)

W.H.S. Aubrey - The Inner Life of the House of Commons. (Illus)

Maurice N. Drucquer - Legal History of Trades-Unionism.

Henry Beaumont - Chartres Cathedral. (Illus)

F.E. Fritsch - The Microscopic Plants of our Waters and Their Part in the
World's Economy. (Illus)

Mrs E. Burton-Browne - the Development of Sculpture in Greece and Rome. (Illus)

Frank J. Sawyer - The History of England as Taught in Its Songs. (Vocal Illus.)

Harry Furniss - Charles Dickens and Today. (Illus)

Lectures, 1890 - 1912.1906 - 7.

E. Ray Lankester - The Origin of the Elephant. (Illus)

Robert Ball - Earthquakes and Volcanoes. (Illus)

Carl Armbruster - The Ballads of Carl Loewe. (Illus)

Alfred Austin - The Relation of Literature to Politics.

Hubert von Herkomer - Artistic Possibilities of the Machine.

Cecil Carus-Wilson - Secrets in Sands. (Illus)

T. Cato Worsfold - The Obergammergau Passion Play. (100 illus)

Raymond Blathwayt - The English in Egypt. (Illus)

William Manning - The Middle Class.

G.C. Haite - Designs and designers of the Victorian Era. (Illus)

Hans Wessely - Chamber Music (Illus by the Wessely Quartet.)

J. Stephen Barras - The Churches of the City. (Illus)

J.W. Jenkinson - Tadpoles - A Study in Embryology. (Illus)

W. Herbert Garrison - 1) Volcanoes; 2) The Fire Belt Round the Earth; 3)
earthquakes and Geysers. (Christmas course for juveniles - illus)

Henry Bradley - English Place-Names.

M.N. Drucquer - International Aspect of Marriage and Divorce.

W.B. Bottomley - The Wonder Workers of the Soil. (Illus)

J.H.B. Masterman - Some Recent Developments in the British Constitution.

C. Harrison Townsend - The Art of Pictorial Mosaic.

Edmund Gosse - The Novels of Benjamin Disraeli.

William Ramsay - The Transmutation of Elements. (Illus)

C.J. Tabor - Some Hints on Collecting Old China. (Illus. by Specimens)

Harry de Windt - Through Savage Europe. (Illus. by cinematograph)

Charles W. Pearce - The Lives and Music of Henry Smart and Edward J. Hopkins.

(Illus)

Spencer Leigh Hughes - Parliament from the Press Gallery.

Lectures, 1890 - 1912.1906 - 7.

H.E. Armstrong - Scientific Method. (Illus)

1907 - 8.

The Earl of Lytton - Leaders of Men.

George Simonds Boulder - Across the Andes of Peru. (Illus)

W.M. Flinders Petrie - Ancient Egyptian Houses. (Illus)

Orton Bradley - American Composers. (Illus)

F. Hamilton Jackson - Romanesque Ornaments. (Illus from negatives by J. Cooper
Ashton)

Henry Hill - The Mind of the Ant. (Illus)

Eric Stuart Bruce - The Coming of the Aeroplane. (Experiments and Illustrations)

Bryan Corcoran - St. Olave's, Hart Street and the Old City Wall. (Illus)

William Barnes Steveni - The People, Army and Resources of Russia, (Illus)

Henry Hills - The Literature of Youth.

Arthur Fish - British Painters and Pictures. (Illus)

F. Martin Duncan - Forest Life. (Illus)

Edward B.V. Christian - The Official Biographer of Dr. Johnson.

Alexander Mackenzie - Bohemian School of Music. (Illus)

Grenville A.J. Cole - Three Days of Open-Air Geology. (Christmas course, Illus)

Arnold White - The Problems of a Great City.

A. Smythe Palmer - Some Survivals in Folklore.

Arthur R. Hinks - The Evidence for Life of Mars. (Illus)

Isaac Sydney Scarf - Flames. (Illus)

Leonard Erskine Hill - Researches on Deep Sea Diving. (Illus . by experiments.)

C.J. Tabor - The Furniture of an English House a Century Ago. (Illus by
specimens.)

Alfred E. Carey - Prehistoric Man on the Highlands of East Surrey. (Illus)

Albert J. Windus - Municipal and Company Finance - A Contrast.

Lectures, 1890 - 1912.1907 - 8 (cont.)

W.B. Bottomley - Soil Innoculations. (Illus)

J. Bridge - Two Noble Brothers (William and Henry Lawes) (Illus. by Westminster
Abbey Choristers.)

P. Chalmers Mitchell - Ruminating Animals. (Illus.)

W. Benham - Newgate. (Illus)

1908 - 9.

W.M. Flinders Petrie - Excavations in Memphis. (Illus)

W. Evans Darby - Hague Conferences and the Political Machinery of Peace.

Cecil Carus-Wilson - Underground Water Supply. (Illus) (Travers lect.)

Carl Armbruster - The Songs of Robert Franz. (Illus)

Arthur Fish - Round the Tate Gallery. (Illus)

William Willett - The Waste of Daylight.

Henry Beaumont - A Tour in Central France, including the Cathedrals of Bruges
and Tours. (Illus)

Edmund B.V. Christian - An Apology for the Suburbs.

J.W. Jenkinson - Sea Urchins and the Relation Between the Individual and Its
Environment. (Illus)

C.W. Salëeby - Evolution: fifty years after.

Earl of Ronaldshay - Railway and Commercial Enterprise in China at the Dawn
of the 20th Century. (Illus) (Travers lect.)

F. Hamilton Jackson - Cattaro and Ragusa, the Cities, the Country and the
People. (Illus. from negatives)

Maberly Phillips - Romance in Banking. (Illus)

Alexander Mackenzie - Brahms.

William Bateson - Mendelian Heredity. (Illus)

W.H. Garrison - Outposts of the British Empire. (Illus)

F. Martin-Duncan - Romance of Animal Life in the Sea.) Illus., by unique
Romance of Animal Life on Land. slides of the creatures
in their natural

Lectures, 1890 - 1912.

1908 - 9 (cont)

[illegible]

Vivian B. Lewes - Water and its Work. (Illus)

William Rothenstein - A Basis for the Appreciation of Works of Art.

A.J. Windus - County Council Finance and Audit. (Travers lect.)

Arnold White - The Outlook for Britain.

Charles Welch - London's Place in History. (Illus)

H. Walford Davies - The Problem of Setting Words to Music. (Illus)

Ernst A. Gardner - Nature and Convention in Ancient Art, (Illus)

William Poel - Shakespeare and a National Theatre. (Illus)

Leonard Erskine Hill - The Use of Oxygen - Demonstration of Life Saving

Apparatus for Use in Mines and Submarines.

J.F. Bridge - Dr. Samuel Pepys, lover of musique. (Illus. by members of the choir of Westminster Abbey.)

Thomas Okey - Leaves from an Old Venetian Diary.

F. Harwood Lescher - Drugs and their Commerce. (Illus. with specimens.)

Bernard Pares - Russia - Economic Development. (Travers lect.)

Max Warchter - European Commercial Federation. (Travers lect.)

1909 - 10.

P. Chalmers Mitchell - The Feeding of Animals in Captivity. (Illus. with lantern slides)

F. Martin-Duncan - The Romance of Plant Life (Illus. by the Lumiere
Autochrome Colour Process and Lantern Slides.)

Spencer Leigh Huges - Candidate, Member and Ex-member.

Cecil Sharp - English Folk Singers and Their Songs. (Illus)

John Garstang - The Hittites: Progress and Research. (Illus)

Percy Fitzgerald - The First Printed Book - (Illus)

Leon Gaster - Modern Methods of Artificial Illumination. (illus)

Lectures, 1890 - 1912.1909 - 10 (cont.)

H.S. Hele-Shaw - Aerial Navigation: Past, Present and Future. (Illus. by experiments and lantern slides.)

Henry Beaumont - An Architectural Journey from Noyon to Rheims. (Illus)

William Archer - The Coming National Theatre. (Illus. with Lantern Slides.)

J. Holland Rose - Napoloen the Great. (Illus.)

H. Walford Davies - Church Music. (Illus. by members of the Temple Choir.)

Vaughan Cornish - The Panama Canal and Its Makers. (Illus.)

Alfred E. Carey - The Glacial Invasions of England and Wales. (Illus)

Henry Hill - 1)The Story of the Spiders; 2)The Story of the Flies; 3)The Story of the Ants. (Illus. Christmas course.)

I. Collanz - Christmas and Drama.

E. Markham Lee - Italian Opera Composers from Cimarosa to Rossini. (Illus)

Alex Hill - The Senses: Newsagent of the Mind. (Lantern slides and blackboard)

Walter Raleigh - The Meaning of Romance.

A.H. Dunning - Amongst the Savages of New Guinea. (Illus.)

Edward W.D. Manson - The "Limited" Company in the 20th Century.

Edmund Gosse - The Ethics of Biography.

T.T. Norgate - On the Edge of the East. (Illus.)

A.F. Pollard - Politics and Character.

J.F. Bridge - Nicola Matteis: a 17th Century Paganini. (Illus. on violin and piano.)

1910 - 11.

James Murray - The Making of a Dictionary. (Illus.)

Cecil Carus-Wilson - Secrets in a Pebble-Beach. (Illus. by specimens, experiments and slides.)

Ashley P. Abraham - Rock Climbing in Great Britain. (Illus)

Alexander Mackenzie - The Masters of Chamber Music. (Assisted by the Wessely Quartet)

Lectures, 1890 - 1912.1910 - 11 (cont.)

Alfred G. Temple - The Pre-Raphaelite Movement in England - Rossitti, Millais,
Holman Hunt. (Illus.)

Percy Fitzgerald - Calais, Old and New. (Illus.)

T.T. Norgate - Corsica, the Land of the Vendetta. (Illus.)

E. Markham Lee - Chopin, the Man and His Music. (Illus.)

Ronald Ross - Malaria. (Illus)

Edward W.D. Manson - Imprisonment for Debt. (Travers lect.)

F.W.G. Foat - The Study of History.

Vivian B. Lewes - Smoke and Its Prevention. (Illus)

Henry Beaumont - Ruskin's Bible of Amians. (Illus.)

Maberly Phillips - Love, Legend and Life, 'Twixt Tyne and Tweed. (Illus)

F. Martin-Duncan - 1) Spring and Its Studies.	}	Illustrated.
2) Summer, the Pageant of Nature.		
3) Autumn and Winter, the Web of Life.)		Christmas course.

Ernest A. Gardner - Art as Expression and as Illustration. (Illus)

David George Hogarth - Cretan Discoveries. (Illus)

J.E.C. Welldon - Some Thoughts Suggested by Travel Over the Empire.

R.D. Roberts - The Grand Canyon of Colorado. (Illus, by original photographs,
some of them by a process of colour
photography.)

Walter Raleigh - Hazlitt.

Orton Bradley - Mignon's Song. (Illus)

Robert W.A. Brewer - The Art of Aviation. (Lantern slides and experiments.)

Silvanus P. Thompson. Life and Work of Lord Kelvin. (Illus.)

Alfred C. Haddon - The Art of Palaeolithic Man. (Illus.)

E. Stanley Roper - Classical Song. (Illus.)

Lectures, 1890 - 1912.1911 - 12.

Oscar Browning - The Study of History.

A. Berriedale Keith - The Development of the Constitution of the Commonwealth
of Australia. (Travers lect.)

H. Charlton Bastian - The Origin of Life Question. (Illus)

Hans F. Gadow - Life of the High Mountains of Mexico. (Illus)

Spencer Leigh Hughes - Oddities in Parliament.

W. Wooding Starmer - Bells and Their Harmonic Tones. (Illus.)

Henry Beaumont - Troyes. (Illus.)

Alfred E. Carey - Breakwater Building.

Alex Hill - Man Under the Microscope. (Lantern slides and photomicrographs)

Hugh Robert Mill - Storm Rains. (Illus)

Selwyn Image - The Meaning and Importance of Decorative Art.

Alfred Kastner - The Harp. (Illus)

Rosalind Travers - Finland. (Travers lect.)

Emile Lesage - A Frenchman's View of England.

F. Martin-Duncan - In Neptune's Kingdom, or The Wonders of Life in the Sea.
(Illus.)

1) The Borderland of Neptune's Kingdom. 2) By Rock and Tidal
Pool. 3) Dwellers in the Deep. (Christmas lectures.)

W.L. Courtney - Learned Greek Women: Sappho and Aspasia.

C. Egerton Lowe - Beethoven, the Man and His Music. (Piano and Violin
Illustrations.)

M.M. Pattison Muir - Alchemy. (Illus. by lantern slides.)

A. Smythe Palmer - Literary Blunders.

Laurence Binyon - Chinese Art. (Illus)

Vaughan Cornish - Waves of the Sea. (Illus. by lantern slides.)

Walter Raleigh - The Writings of Sir George Savile, Marquis of Halifax.

Lectures, 1890 - 1912.

1911 - 12 (cont.)

Major Greenwood, jnr. - Plague; Its Origin and History. (Illus.)

A.F. Pollard - The Evolution of England.

Josiah Booth - Songs and Ballads of Sir Arthur Sullivan. (Illus.)

Appendix VI Table 1.Analysis of lectures (excluding soirees), 1820-1912.

Year	Number of lectures	Scientific lectures	Science lectures as % of total	Cost of lectures to nearest £1
1820-1	54	48	89	£444
1821-2	0	0	0	£193 (1)
1822-3	31	31	100	£450
1823-4	47	34	72	£857
1824-5	29	29	100	£562
1825-6	66	54	82	£752
1826-7	79	57	72	£868
1827-8	61	61	100	£628
1828-9	40	14	35	£605
1829-30	46	20	43	£350
1830-1	36	8	22	£295
1831-2	24	8	33	£298
1832-3	41	27	66	£330
1833-4	57	46	81	£364
1834-5	51	27	53	£398
1835-6	44	30	68	£341
1836-7	48	32	67	£352
1837-8	48	29	60	£335
1838-9	50	32	64	£353
1839-40	57	38	67	£441
1840-1	50	40	80	£388
1841-2	42	24	57	£296
1842-3	51	24	47	£286
1843-4	46	24	52	£262
1844-5	48	26	54	£334
1845-6	52	42	81	£340
1846-7	48	33	69	£362
1847-8	47	26	55	£369
1848-9	48	32	67	£275
1849-50	41	25	61	£358
1850-1	49 (2)	33	67	£292
1851-2	44 (2)	30	68	£326
1852-3	43	36	84	£333
1853-4	38	29	76	£385
1854-5	74 (3)	60	81	£576

Analysis of lectures (cont'd).

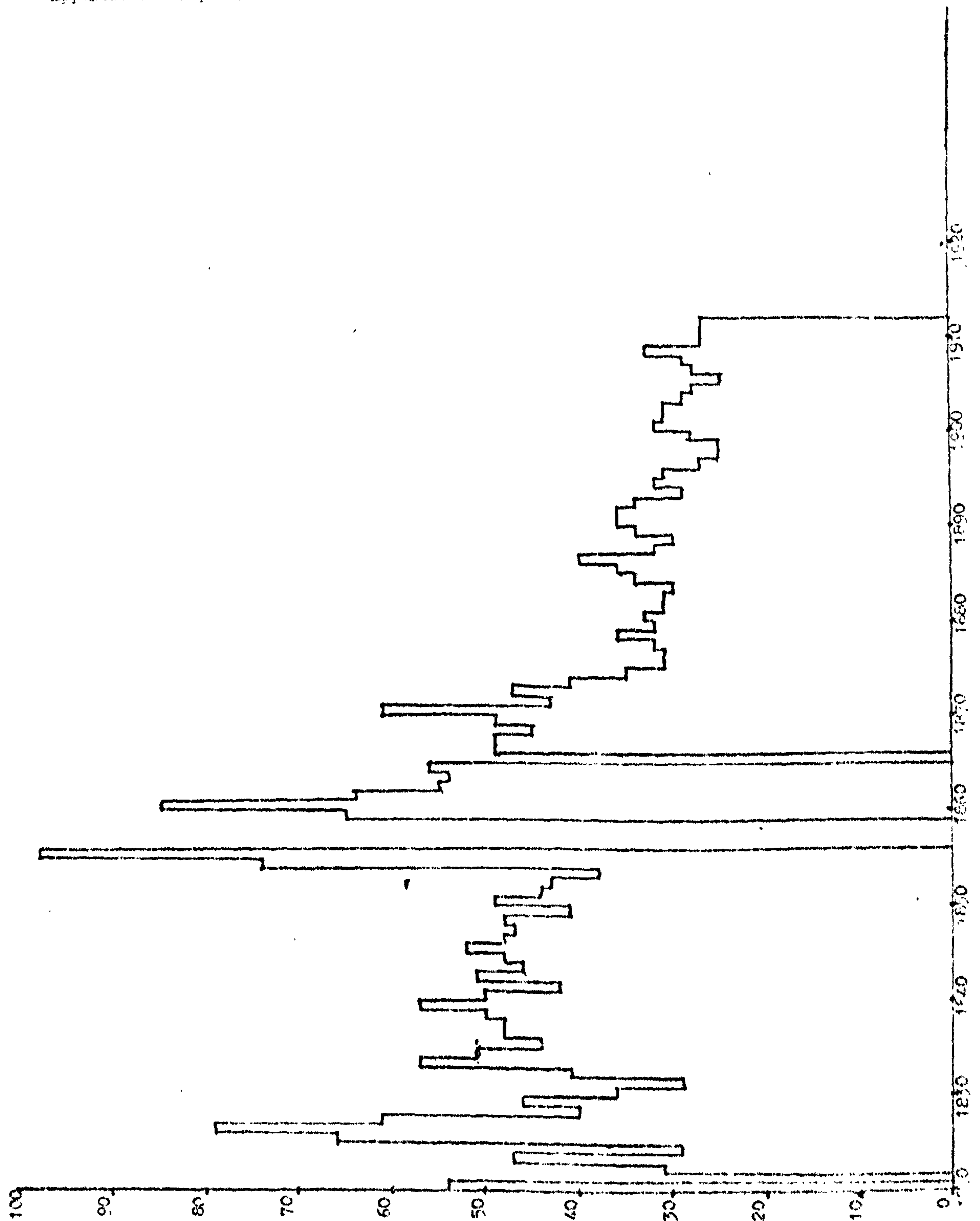
Year	Number of lectures	Scientific lectures	Science lectures as % of total	Cost of lectures to nearest £1
1855-6	98 (3)	75	76	£659
1856-7	- (2) (4)	-	-	£387
1857-8	- (2) (4)	-	-	£462
1858-9	- (4)	-	-	£448
1859-60	65 (3)(5)	54	83	£351
1860-1	85 (3)	62	73	£472
1861-2	64	57	89	£325
1862-3	55	43	78	£372
1863-4	54	41	76	Not known
1864-5	56	44	61	£359
1865-6	- (4)	-	-	£324
1866-7	49	34	69	£280
1867-8	49	37	75	£394
1868-9	45	24	53	£285
1869-70	49 (3)	33	67	£696
1870-1	61 (2) (3)	48	79	£465
1871-2	43 (3)	36	84	£515
1872-3	47 (3)	29	62	£538
1873-4	41 (3)	32	78	£405
1874-5	35	14	40	£593
1875-6	31	16	52	£435
1876-77	31	15	48	£379
1877-8	32	14	44	£403
1878-9	36	20	56	£361
1879-80	32	17	53	£378
1880-1	33	13	39	£323
1881-2	31	12	39	£386
1882-3	31	13	42	£408
1883-4	30	10	33	£347
1884-5	34	16	47	£294
1885-6	36	13	36	£314
1886-7	40	17	43	£388
1887-8	32	16	50	£67
1888-9	30	7	23	£318
1889-90	34	14	41	£392
1890-1	36	14	39	£351
1891-2	36	15	42	£414

Analysis of lectures (cont'd).

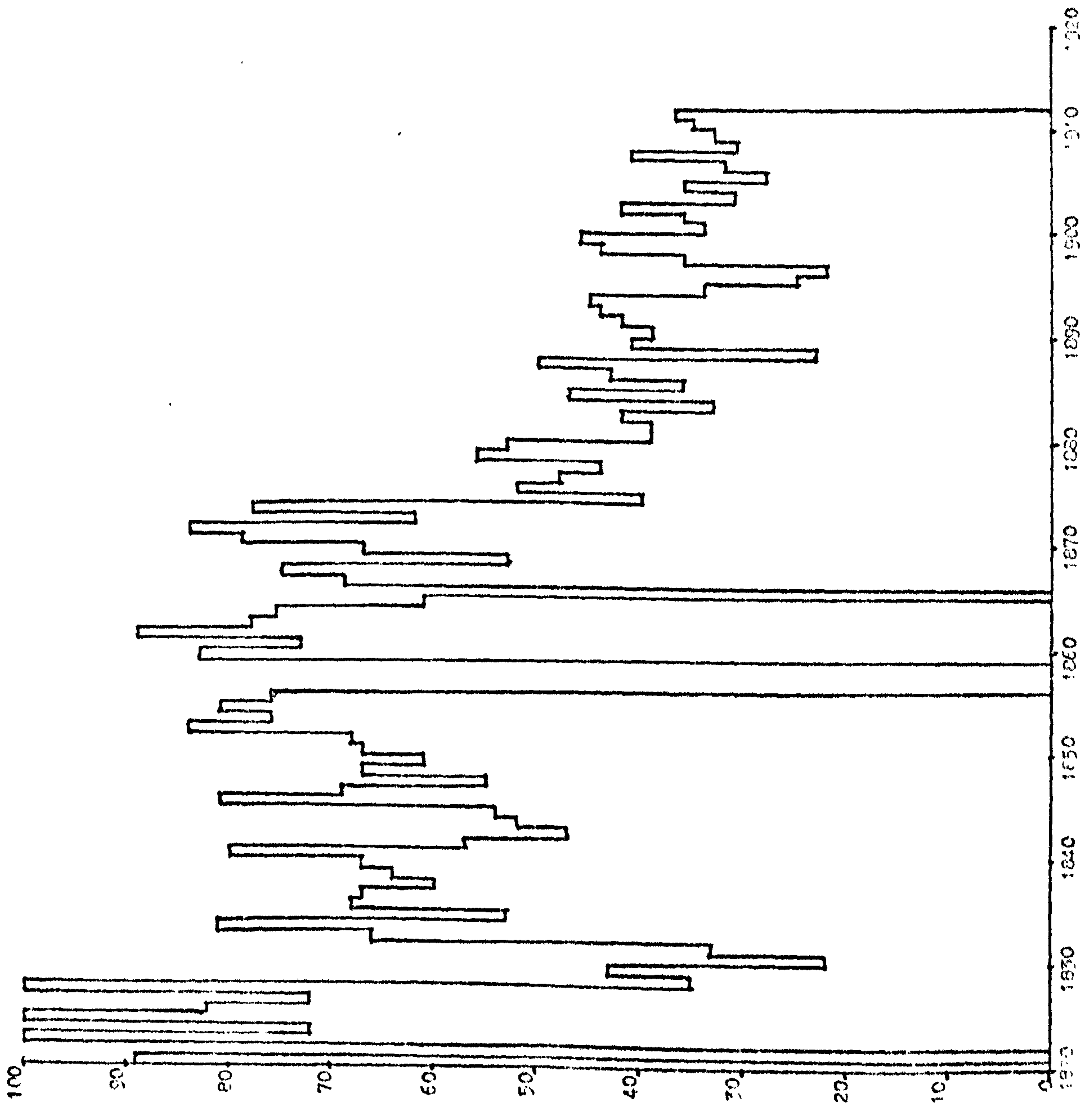
Year	Number of lectures	Scientific lectures	Science lectures as % of total	Cost of lectures to nearest £1
1891-2	36	15	42	£414
1892-3	34	15	44	£451
1893-4	29	13	45	£356
1894-5	32	11	34	£348
1895-6	31	14	25	£246
1896-7	27	6	22	£194
1897-8	25	9	36	£189
1898-9	25	11	44	£257
1899-1900	28	13	46	£247
1900-1	32	11	34	£313
1901-2	31	11	36	£240
1902-3	31	13	42	£202
1903-4	29	9	31	£173
1904-5	28	10	36	£188
1905-6	25	7	28	£188
1906-7	28	9	32	£229
1907-8	29	12	41	£255
1908-9	33	10	31	£236
1909-10	27	9	33	£237
1910-1	27	8	35	£232
1911-2	27	10	37	£227

- (1) Mainly arrears for 1820.
(2) Includes 12 Swiney Lectures.
(3) Includes 'educational' lectures.
(4) No totals available.
(5) Approximate total only.

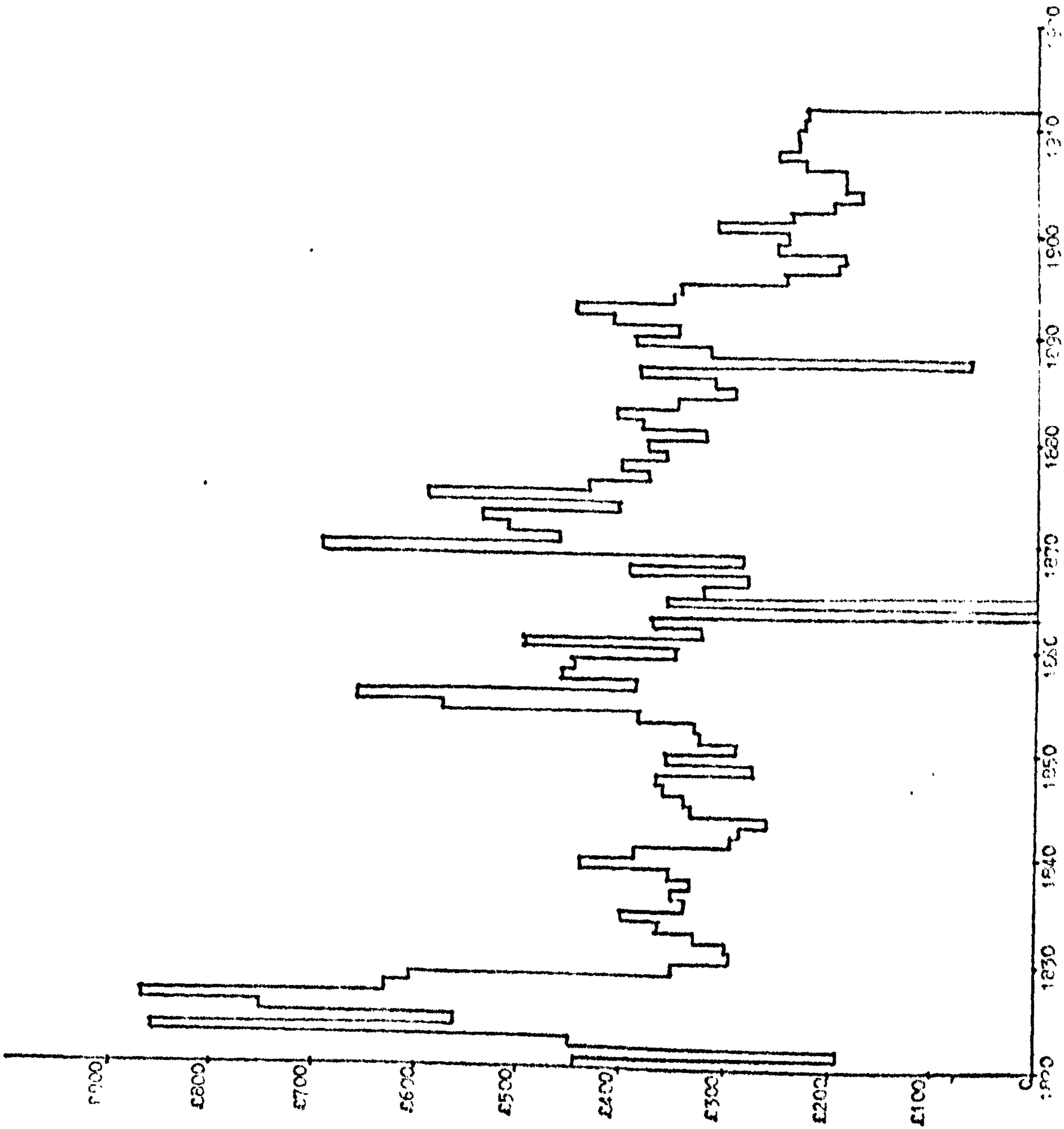
Appendix VI Graph 1. Total number of lectures, 1820-1912.



Appendix VI Graph 2. Science lectures as a percentage of the total.



Appendix VI Graph 3. Cost of lectures (to nearest £1).



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SL50/2 A catalogue of the library, with supplement. London, 1813, 1830.

AN16.8 A collection of managers' and auditors' reports, notices of lectures and other miscellanea. 4 vols. 1805 - 94.

Pam 1721 Continuing members' bye-laws, 1913.

SL50/2 A collection of syllabuses of the lecture courses at the Institution, 1845 - 55.

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Fo Pam731 Plan and bye-laws of the Institution, with a list of the proprietors and life-subscribers. London, printed by Phillips, 1806.

Pam 1717 Preliminary report of the committee of proprietors, ... reporting upon improvements required in the administration of the Institution, 1865.

Pam 1715 Proceedings of an adjourned meeting of a general court of proprietors of the London Institution, 14 September 1812.

Pam 1718 Proprietors' committee, 1865: supplement to preliminary report.
1865.

Pam 1719 Report by the committee of management to the special general meeting of proprietors, summoned for 28 October 1852.

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3 Vols., London, the Institution, 1871 - 1912.

(From 1871 - 1885, it was called the Journal of the London Institution.

It was published at irregular intervals in the years 1871 - 79,

thereafter annually. Reports for 1886 and 1887 do not include lists of proprietors and life-subscribers; 1912 is marked 'official copy' and is corrected in ms.)

Pam 1723 Report of the board on the propositions... for the amalgamation of the Society of Arts and the London Institution, 1905.

2 copies. Pam 465, Pam 1716. Report of the committee appointed to investigate the affairs of the Institution, 1829.

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b) Manuscripts.

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2751 Contracts with the builder and with the architect, and the several specifications for building the house and the theatre, etc. of the London Institution in Moorfields, 1816.

2752 Names of proprietors subscribing an additional 30 guineas, 1813.

2753 List of contributors to the evening parties given at the London Institution from the annual court, 1831.

2758 Rough minute book of the committee of managers, May 1805 to November 1813.

2759 Volume containing summonses to meetings and other papers, 1817 - 29.

2823 Letters, plans and papers relating to the proposed improvements of the premises, 1905 - 8.

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3076 Minutes of the committee of managers, 1807 - 1908, with index. 15 vol.

3078 Report of the committee of enquiry, 1812.

3079 Collection of bills for books bought for the Institution, 1805 - 12.

3080 Collection of original papers, printed and manuscript, bearing on the early years of the Institution, 1807 - 17.

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Item 436, Letter to Armstrong from Thomas Piper, informing him of his appointment as professor of chemistry at the L.I. 21 December 1870.

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Item 441, Letter to Armstrong from Julian Hill on the future arrangements in the laboratory. 9 August 1883.

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A collection of papers made by Charles Goss, librarian of the Institute in the early 1900s and proprietor of the L.I., which includes:

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4. At the Science Museum, London.

Minute paper on sale of apparatus at L.I. , 21 January, 1913.

5. At the India Office Library and Records, London.

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A collection of documents concerned with the School's use of the Finsbury Circus building, 1912-1933, including:

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