

THE HUNDREDTH ANNIVERSARY MEETING.

THE Annual General Meeting was held at Burlington House on Thursday, 3rd April, 1941, at 12 noon. The President, SIR ROBERT ROBINSON, F.R.S., occupied the Chair.

The notice convening the meeting was read and the President then said :

Before proceeding with the formal business of the meeting it will be appropriate to make reference to the fact, which is uppermost in our minds today, that the Chemical Society was founded in 1841. This is the hundredth Anniversary meeting. The present is no time for festive occasions, for reunions with our distinguished Honorary Fellows, for international intellectual co-operation generally, and certainly not for an organised Scientific Congress. Therefore the Council has decided to postpone our Centenary Celebrations, which must be compounded of all these elements, until after the war. Even then there will probably be an interval to allow for preparation. This decision has no negative qualities, but is a positive affirmation of our intention to organise as soon as possible an occasion worthy of the Society's splendid record and high position among the Academies of the world. Any feeling of disappointment arising from the inadequacy of our present action is therefore not warranted, and I am satisfied that the Council's views are endorsed by the great majority of Fellows of the Society.

We may, however, recall a few of the outstanding events relating to our foundation, very briefly, especially in view of the fact that Professor J. C. Philip, President-Elect, is compiling a detailed history of the Society and has already completed his account of the first thirty years.

The man who conceived the idea of forming a Chemical Society was Robert Warington, a chemist of distinction who later made important original contributions to the *Journal*. He was a member of the Mathematical Society of Spitalfields (founded in 1788), and it was in discussions with some fellow-members that the project was born.

Warington enlisted the support of influential chemists, among whom was certainly Thomas Graham, and a meeting was called after it had been ascertained by correspondence that the scheme was likely to receive enthusiastic support. The report dated 23rd February, 1841, shows that there were 77 original members, including W. Crum, C. Daubeny, E. Davy, Warren de la Rue, G. Fownes, W. R. Grove, H. Hennell, W. Herapath, T. C. Hope, G. D. Longstaff, W. H. Miller, T. Moody, F. Penny, Lyon Playfair, J. Stenhouse, T. Thomson, J. Tennant, and many other well-known names. The first officers were : President, Prof. Thos. Graham ; Vice-Presidents, Prof. W. T. Brande, J. T. Cooper, Prof. J. E. Daniell, and R. Phillips ; Treasurer, A. Aikin ; Secretaries, R. Warington and E. F. Teschemacher.

The first scientific meeting was held on 13th April, and the first paper read was a translation of one by Liebig of Giessen on "The Preparation of Yellow Prussiate of Potash." There is much evidence of the very valuable support given by Liebig in the early years of the Society. At this meeting E. A. Parnell of University College, apparently not a member, read a paper "On the Formation of Mellon."

On 27th April a second meeting was held and a gift of five guineas from Dr. W. B. Leeson was acknowledged. This donation remained alone in the records for more than two years. A letter from Mr. Scanlan of Wolverhampton was read. It described flashes seen on crystallisation of strontium nitrate in the dark.

Other papers were read and appeared later in the "Memoirs." (Three volumes of "Memoirs and Proceedings" were succeeded by the *Quarterly Journal*.) A note by the President described an improved method of preparation of chlorates. He recommended the use of a mixture of slaked lime and potassium carbonate for the more economical use of chlorine. This is mentioned as an instance of the great interest taken in good preparative methods and in the industrial applications of chemistry.

At the meeting on 11th May the gift by Dr. Daubeny of his "Lectures on Agriculture" was acknowledged. The library at this time could probably have been housed on a single shelf. Papers read were by Professor William Gregory of Aberdeen on the preparation

of pure hydrochloric acid and by Liebig and Redtenbacher on the atomic weight of carbon. At this and at most succeeding meetings the election of new members and associates was announced. On 1st June Liebig was elected the first Foreign Member. Robert Bunsen was similarly honoured on 1st February, 1842, Joseph Redtenbacher of Prague on 14th March, 1842, and A. W. Hofmann in 1845.

After the vacation, on 2nd November, a letter from Dumas on the analysis of air was read. On 7th December a paper by Bunsen of Marburg was read; it described new caccodyl compounds containing platinum. On this occasion Warington read a paper on the preparation of chromic acid. On 4th January, 1842, the name of Michael Faraday appears among those of the new members, and on 15th March the election of Edward Schunck was announced. James P. Joule became a member in 1844.

The first Anniversary meeting was held on 30th March, 1842. Faraday became a Vice-President and George Fownes joined R. Warington as Secretary; E. F. Teschemacher became Foreign Secretary. The Council's Report was hopeful, if a little austere in places. It was stated that the Society was induced to leave its first home in the Rooms of the Society of Arts, John Street, Adelphi, because of some anticipated inconvenience in the performance of experiments. The Council was by no means satisfied with the new quarters in the Western Literary and Scientific Institute, as it had no Council Room and no library facilities or space for the preservation of specimens. It appears that the member's subscription was £2, and one composition of £10 was paid. On this first occasion the Auditors' report agreed with the Treasurer's Balance Sheet within the limits of experimental error.

The progress of the Society after its first year cannot be followed here because the subject is too large. We moved back to John Street, rejected a suggestion of Kensington Gore because of the inconvenience of the suburbs, then went to Cavendish Square, and a little time later to Burlington House. The number of members grew as follows: 1843, 77 London, 57 country members and 3 Foreign members; 1844, the numbers were 78, 71, and 4, respectively, as well as 15 associates; 1845, 88 London members and 90 country members. This shows how quickly the Society became national in scope.

And so from strength to strength; the membership, the number and even the importance of original communications increased rapidly; the library, at first a mere nucleus, developed until the problem was not how to secure books but how to house them. Abstracts, Memorial Lectures, a list of Foreign members that could be used as headings for a History of Chemistry, Annual Reports, Research Grants, the Scheme of Co-operation—no attempt can be made today to appraise this great achievement. But finally we may be sure that the centenary will be celebrated in no spirit of self-satisfaction; the Chemical Society will not rest on its laurels, and the glories of the next hundred years will equal those of the past. This is the faith in which the pioneers of 1841 would wish us to persevere.

The PRESIDENT then referred to the fact that he had received the following letter from the Chancellor of the Duchy of Lancaster.

From the Chancellor of the Duchy of Lancaster.

55, *Whitehall*,
S.W. 1.
24th March, 1941.

DEAR SIR ROBERT,

The Scientific Advisory Committee of the War Cabinet, of which I am Chairman, were much interested in the account which you gave them the other day of the work of the Advisory Research Council set up by the Chemical Society.

You explained to the Committee that the Council's object was to suggest to research workers in University Departments problems which they might usefully attack as volunteers, but which were not of sufficient urgency to warrant the expenditure of public funds. The Committee noted that more than 100 such problems had been taken up and were being actively pursued.

The Committee felt that voluntary work of this kind was of the greatest value as a

contribution to the national war effort and they invited me, as Chairman, to write and convey to you their appreciation of the work which the Advisory Research Council of the Chemical Society is doing. In order to strengthen the contacts between the Council and the Scientific activities of Government Departments, the Committee requested the Secretaries of the Department of Scientific and Industrial Research, of the Medical Research Council and of the Agricultural Research Council to refer to your Society any suitable problems that might come to their notice.

Yours sincerely,
(Signed) HANKEY.

Sir Robert Robinson, F.R.S., M.A.

It was agreed that the thanks of the Society be returned for this encouragement of the work of the Advisory Research Council.

The Report of Council for 1940 was presented, and the Senior Secretary, in introducing the general sections of the Report, referred to the launching of the new Co-operation Scheme, and recalled the great debt that it owed to Dr. Ellingham for his advocacy, and for the time and energy he had devoted, when Senior Secretary of the Society, to formulating a practicable basis of co-operation. He then spoke of the excellent work of the depleted office staff during the winter months, when the additional burden involved by the inauguration of the new scheme was superimposed upon the difficulties resulting from enemy action over London, and paid a tribute to Mr. Carr, the General Secretary, for the great part he had played in maintaining the normal services of the Society under trying conditions.

The Treasurer, who was then called upon by the PRESIDENT to deal with the accounts, said that he regarded the year 1940 as a transitional year, as in 1941 the new Scheme of Co-operation came into being. But for that the decrease in membership subscriptions of £305 15s. 2d. would have involved serious implications for the future. As, however, there were so far over 1300 chemists who had applied for membership of the three Chartered Bodies under the Scheme, and of these over 700 were not Fellows of the Chemical Society in 1940, he thought that they could face the future with confidence, even despite the year's deficit.

Turning to the Report of the Bureau of Chemical and Physiological Abstracts, he pointed out that the accounts for A III were now embodied in that report, and not in the accounts of the Society, since the Bureau was responsible for administering the A III Fund. He also stressed the importance of the renewal of the Agreement for the production of A III and the increased grants promised from contributing Societies. He mentioned that work on the Quinquennial Index was proceeding satisfactorily, the Author Index having been published during 1940, and the Subject Index was expected to be ready before the end of 1941.

He then drew attention to the creation of the Special Reserve Fund and to the fact that the deficit of £463 10s. 11d. shown in the General Purposes Account was due to the transfer thereto of £1100 on account of Publications and £200 on account of Library expenditure.

The effect of the last war on the cost of publications was shown in Table I.

TABLE I.

Cost of JOURNAL and ABSTRACTS, 1914, 1919, 1920, and 1921.

Year.	Gross cost.	Increase over 1914.	Sales.	Net cost.	Net increase over 1914.
	£	£	£	£	£
1914	5,833	—	1401	4432	—
1919	7,246	1413	1820	5426	994
1920	9,416	3579	2591	6821	2389
1921	11,524	5691	3100	8424	3992

These increased costs were due to the abnormal number of papers received for publication owing to the great influx of students to the Universities after the war, and to

the leeway in abstracting that had to be made up. As surpluses obtained during the war years were invested in the general funds of the Society, financial difficulties supervened in the post-war years.

A similar situation had arisen in this war, as was shown in Table II.

TABLE II.

Cost of JOURNAL and ABSTRACTS, 1939 and 1940.

Year.	Cost of production.				Sales.				Year.
	<i>Journal.</i>		A I and A II.		<i>Journal.</i>		A I and A II.		
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	
1939	6651	13 0	5654	2 1	3250	16 5	2069	10 5	1939
1940	5839	3 4	4767	2 7	2768	6 2	1894	8 9	1940
Saving	812	9 8	886	19 6	482	10 3	175	1 8	Decrease
Total saving			£1699 9s. 2d.		£657 11s. 11d.		Total decrease.		
Net saving £1041 17s. 3d.									

Since conditions might be expected to be not very different in the post-war years from those prevailing from 1919 onwards, the Council had decided to put £1100 to the Special Reserve Fund on account of publications.

Turning to the Library Account, he pointed out that a sum of £200 had been put to the Special Reserve Fund on account of books and binding, and it was anticipated that this would be sufficient to purchase books and periodicals not now obtainable in this country. The saving in expenditure on books, periodicals, and binding was much greater than this, viz. £384 11s. 11d., but there were far fewer scientific and technical books being published during the war.

The Accounts and Balance Sheets therefore represented, as far as could be foreseen, the financial position of the Society at the present time, provision having been made for post-war eventualities.

The adoption of the Report of Council for 1940, including Statements of Accounts and Balance Sheets, was proposed by Professor F. J. Wilson, seconded by Dr. J. T. Hewitt, and carried unanimously.

The names of Fellows elected to vacancies on the Council were declared as follows :

President : Professor J. C. Philip.

Vice-Presidents, who have filled the Office of President : Professor P. F. Frankland, Professor G. G. Henderson, Sir Robert Robinson, Professor N. V. Sidgwick, Professor W. P. Wynne.

Elected Ordinary Members of Council :

Constituency I. South-East England.

Dr. H. J. Emelús (London).

Dr. J. J. Fox (London).

Dr. B. C. Saunders (Cambridge).

Constituency IV. North-East England.

Professor J. M. Gulland (Nottingham).

Professor R. D. Haworth (Sheffield).

Constituency V. Scotland.

Professor G. F. Marrian (Edinburgh).

A vote of thanks to the Vice-Presidents, Treasurer, Honorary Secretaries, Council, and Committees for their services during the past year, proposed by Professor T. S. Moore and seconded by Dr. H. J. Emelús, was carried unanimously, Professor F. M. Rowe making acknowledgment.

On the motion of Dr. F. S. Dainton, seconded by Mr. T. H. Reade, Messrs. W. B. Keen & Co., were appointed auditors for 1941.

The meeting was then adjourned.

A luncheon at which eighty Fellows and their guests were present was held at Kempinski's Restaurant, Swallow Street, at 1 p.m. At the conclusion of the luncheon, after the loyal toasts had been honoured, the President referred to the presence of Dr. J. B. Conant, President of Harvard University, and called on Professor N. V. Sidgwick to propose his health. This was acknowledged by Dr. Conant.

The toast of the newly elected President, Professor J. C. Philip, was proposed by Sir Robert Pickard and acknowledged by Professor Philip.

At 2.45 p.m. the meeting was resumed and the retiring President, Sir Robert Robinson, delivered his Presidential Address, entitled "The Mechanism of the Benzidine Rearrangement and some Related Topics." At its conclusion a vote of thanks to the President for his services in the Chair during the past two years and for his Address, with the request that he would allow the Address to be printed in the *Journal*, was proposed by Professor J. L. Simonsen and seconded by Dr. J. Kenyon. This was carried unanimously, and acknowledged by Sir Robert Robinson.

Professor J. C. Philip was then inducted into the Chair and spoke for a few minutes, expressing his appreciation of the honour that had been conferred on him.

REPORT OF COUNCIL, 1940.

The outstanding feature of the year has been the adoption by the Chemical Society, the Institute of Chemistry, and the Society of Chemical Industry of the new Scheme of Co-operation. This was approved after having been circulated to Fellows for their comments, and comes into effect on the 1st January, 1941. Whilst it is impossible to forecast the ultimate consequences of this step in co-operation, it can be predicted that many more chemists will be attracted by the joint membership concessions to participate in the work of the Society, and that with the aid of the Chemical Council it will be possible to improve the Publications, which for many years have suffered from financial restrictions. The inception of the Scheme has imposed much extra labour on the already depleted Staff of the Society, and the Council trust that Fellows will show forbearance while the initial difficulties are being overcome.

The Society will attain its Centenary in 1941, and it is the hope of the Council that this event will be celebrated appropriately when peace has been established. In the meantime the activities of the Society continue on a wartime scale. Both *Journal* and *Abstracts A* have diminished in size, but have continued to appear at monthly intervals.

The rooms of the Society have so far been fortunate in escaping serious air raid damage. Joint arrangements for firewatching have been made in co-operation with the other Societies occupying rooms in Burlington House, and it is believed that the measures taken have greatly reduced the danger from incendiary bombs.

I. FELLOWSHIP.

(1) *Fellowship Statistics.*

The number of Fellows on the 31st December, 1939, was 3773. During 1940, 153 Fellows were elected and 11 reinstated, the corresponding figures in 1939 being 186 and 15, respectively. The Society has lost 50 Fellows through death, 121 by resignation, and 71 by removal for non-payment of annual subscription, making a total loss of 242, as against 227 in 1939. The number of Fellows on the 31st December, 1940, therefore, was 3695, showing a decrease of 78.

The names of those Fellows to whom the Council have conveyed the congratulations of the Society on completing 60 and 50 years of Fellowship have appeared in the *Proceedings*. Among these is Professor Percy F. Frankland, President from 1911 to 1913.

(2) *Deaths.*

The Council deplore the loss of their distinguished Honorary Fellow, Sir Joseph J. Thomson, O.M., F.R.S., whose death took place on the 30th August. They have also to

mourn the loss of two Past-Presidents, Sir Gilbert T. Morgan and Sir Jocelyn F. Thorpe. Resolutions expressing the sympathy of the Council and recording their high appreciation of the services rendered by these Fellows to the Society have been passed and published in the *Proceedings*.

The Council are arranging for a Memorial Lecture to be given in honour of Sir J. J. Thomson, and for Obituary Notices of Sir Gilbert Morgan and Sir Jocelyn Thorpe to be published in the *Journal*.

II. PUBLICATIONS.

(1) *Journal*.

During the year 291 papers were received by the Society; of these 5 were declined.

In addition to Obituary Notices and reports on Atomic Weights, Isotopes, Inorganic Nomenclature, and the Annual General Meeting, the *Journal* for 1940, occupying 1576 pages, contains 297 memoirs (73 on General, Physical, and Inorganic Chemistry and 224 on Organic Chemistry), 15 notes, and 5 lectures, including the Presidential Address. The corresponding figures for 1939 are 1962 pages, 401 memoirs, 33 notes, and 4 lectures.

(2) *Abstracts*.

The report of the Bureau of Chemical and Physiological Abstracts for 1940 appears as Appendix A to this report.

As a measure of economy, the Council informed the Bureau that the cost of Abstracts A I and A II in 1940 must not exceed that for 1939, and that the number of pages should be at least 200 less in 1940 than in 1939. It has also been decided that a smaller type shall be used in 1941.

The original Agreement for the production of A III, which expired at the end of 1940, has been extended for a further period of three years, and the Society has increased its grant from £1300 to £1500 per annum.

During the year Dr. L. H. Lampitt was elected Chairman of the Bureau and Mr. F. P. Dunn Treasurer. It has also been decided that Miss M. Le Pla (Indexer) and her staff should be under the sole control of the Bureau.

(3) *Annual Reports*.

Volume XXXVI (1939) of the *Annual Reports on the Progress of Chemistry*, published in April, 1940, contained 419 pages compared with 410 in the preceding volume.

III. MEETINGS.

(1) *Scientific Meetings*.

The Society has held three Lectures in London. Owing to the intensification of War conditions, no meetings have been held in London since April.

The Council are gratified to record that 27 meetings were held outside London. A complete list of these meetings is given in Appendix C.

(2) *Anniversary Meetings*.

The Anniversary Meetings of the Society were held in London on 4th April, 1940. These included Sir Robert Robinson's Presidential Address entitled "Some Aspects of the Chemotherapy of Tuberculosis. A Speculation regarding the Ring Structure of the Sterols and Related Substances," and the Sørensen Memorial Lecture by Professor E. K. Rideal. A full report of the meeting appeared in the *Journal* for April.

IV. LIBRARY.

The Report of the Joint Library Committee for 1940, and an extract from a report by the Chairman on the working of the Library during the past 20 years are given in Appendix B.

V. ADVISORY RESEARCH COUNCIL OF THE CHEMICAL SOCIETY.

The Advisory Research Council of the Chemical Society has continued to receive offers of assistance from Supervisors of Research, and has now allocated 173 topics of research to Research Workers. It has been unable to suggest topics to all those who have offered their services, and would welcome further suggestions, particularly those of a physico-chemical nature.

During the year a Scheme has been formulated in order to meet through the agency of volunteer workers demands for fine chemicals required for work of national importance and not available through the normal channels.

VI. ADMINISTRATION.*Local Representatives.*

The resignations of Dr. J. A. V. Butler and Dr. A. B. Crawford from the office of Local Representatives for Edinburgh and Glasgow, respectively, were received with much regret, and the Council have appointed Dr. G. H. Christie and Dr. T. S. Stevens to fill the vacancies. Dr. E. A. Moelwyn-Hughes, who has deputised for Dr. F. B. Kipping as Local Representative for Cambridge, has had to relinquish office owing to temporary absence from Cambridge; Dr. F. S. Dainton has consented to act in his place.

VII. FINANCE.*(1) Contributions.*

The Council have received contributions of £1150 from the Chemical Council and £550 from the Government Publications Grant (through the Royal Society) towards the cost of the Society's publications for 1940, and have expressed their sincere thanks for these substantial grants. The Council also acknowledged with gratitude the contributions received from the following Fellows to the Publications Fund: Messrs. P. Appleyard, R. H. Atkinson, P. K. Dutt, J. A. Newton Friend, W. E. Garner, F. W. Kirkbride, D. H. Peacock, W. G. Polack, J. E. B. Price, Sir David Rivett, R. Robison, H. G. Rule, F. C. Smith, R. B. Turbutt, and G. W. Young.

Valuable gifts of the Society's publications have been received from the following, to whom the thanks of the Council have been conveyed: Messrs. G. Adams, A. Bracher, H. E. Brothers, C. Fuller, P. J. Garner, J. W. Peck, L. M. Nash, H. E. Stevenson, G. A. Stokes, P. Szego, N. Garrod Thomas, Miss K. A. Cumming, Mrs. O. Gatty, and Imperial Chemical Industries, Ltd.

(2) Bequests.

The Council have received with gratitude a bequest of £100 under the Will of the late Mr. Emile Mond, which has been placed to the Special Reserve Fund; they are also pleased to announce that under the Will of the late Sir Gilbert Morgan, the income from the residuary estate, subject to life interests, has been left to the Society on certain conditions.

The following form of bequest has been approved by the Council:

" I,, of, give and bequeath to The Chemical Society, Burlington House, Piccadilly, London, W. 1, free from deduction on account of any and every kind of death duty the sum of for the use of The Chemical Society in such manner as the Council may in its absolute discretion determine. The receipt of the Treasurer or other Officer for the time being of The Chemical Society shall be a sufficient discharge for the same."

VIII. RELATIONS WITH OTHER BODIES.*(1) The Chemical Council.*

The representatives of the Society on the Chemical Council were Professor F. G. Donnan, Mr. F. P. Dunn, and Professor I. M. Heilbron.

(2) Representatives of the Society on other Bodies.

During 1940, the Society was represented as follows :—

Bristol University Court :

Professor F. G. Donnan.

British National Committee for Chemistry :

Professor F. G. Donnan, Mr. F. P. Dunn (Treasurer), Dr. C. W. Davies (Senior Secretary).

British Standards Institution :

Council of Chemical Division : Dr. J. J. Fox.

Technical Committees :

Co-ordinating the work of the Divisional Councils in regard to any British Standard which may be issued in future for units, conversion factors, fundamental formulæ, values for properties of materials, etc. : Dr. H. J. T. Ellingham.

Specifications for Materials and Plant used in Electroplating : Dr. U. R. Evans.

Standardisation of Scientific Glassware : Mr. F. R. Ennos, Dr. E. B. Hughes.

Standards for use in Dairying Chemistry : Mr. Eric Voelcker.

Standardisation of Letter Symbols : Dr. C. F. Goodeve.

Bureau of Chemical and Physiological Abstracts :

Professor C. R. Harington, Dr. G. A. R. Kon, Dr. H. J. T. Ellingham, and one of the Hon. Secretaries, with the Treasurer, *ex-officio*.

City and Guilds of London Institute :

The President.

Faraday Society :

Colloid Committee : Mr. D. C. Henry.

Home Office :

Air-Raid Precautions Department : Mr. J. Davidson Pratt.

Joint Library Committee :

Professor A. J. Allmand, Professor H. Bassett, Dr. O. L. Brady, Professor C. H. Desch, Mr. M. B. Donald, Dr. H. J. Emeléus, Dr. C. F. Goodeve, Dr. P. Haas, Professor C. R. Harington, Dr. T. A. Henry, Dr. E. W. McClelland, Dr. E. E. Turner, Professor W. Wardlaw, Dr. J. C. Withers.

Laves Agricultural Trust :

Committee of Management : Dr. E. F. Armstrong.

Royal Microscopical Society :

Standardisation of Biological Stains : Professor A. G. Green.

Royal Society :

Joint Standing Committee for Symbols and Abbreviations : Dr. C. W. Davies, Dr. H. J. T. Ellingham.

IX. ACKNOWLEDGEMENTS.

The Council gratefully avail themselves of this opportunity of expressing their sincere thanks to the many Fellows who, notwithstanding prevailing conditions, have continued to give their services freely to the Society during the year. They would especially mention Local Representatives, those serving on Committees, refereeing papers for the *Journal*, contributing to the *Annual Reports*, and delivering lectures.

APPENDIX A.**REPORT OF THE BUREAU OF CHEMICAL AND PHYSIOLOGICAL ABSTRACTS FOR THE YEAR 1940.**

The outstanding events of an exceptionally active year in the history of the Bureau have been the appointment of a new Chairman; the appointment of an Honorary Treasurer, and the presentation to the Bureau of quarterly statements showing the financial position of the various sections of the Abstracts; the decision of the participating Societies to extend the agreement for the production of Abstracts A III; the decision of the Society of Chemical Industry to issue Abstracts B separately from the Transactions and in three parts, and the bringing of the Indexing staff completely under the control of the Bureau.

Eleven meetings of the Bureau were held during the year, as well as six meetings of the Finance Committee, and two of the A III Abstracts Sub-Committee.

The Chairman.—The Bureau suffered a great loss through the death, in February, of Sir Gilbert Morgan, who had filled the office of Chairman since 1933. Most fortunately the Bureau was able to persuade Dr. L. H. Lampitt to accept the Chairmanship.

Staff.—After twelve years' efficient service, Dr. J. J. Fox resigned his position as Assistant Editor in June. The Bureau has been fortunate in securing Dr. W. Jevons to fill the vacancy.

Finance.—With the cordial approval of the Societies, the Bureau, in March, appointed Mr. F. P. Dunn as its first Honorary Treasurer. The Finance Committee has been strengthened by the election of Professor C. R. Harington as an additional member. During the year the Finance Committee has been able, for the first time, to put before the Bureau quarterly statements showing the total costs of all sections of the monthly Abstracts, and of the Indexing Dept. The statements mentioned above show that the total cost of the Abstracts for 1940, including overhead expenses was as follows: A I and A II, £4767 2s. 7d.; A III, £4428; B, £5321 18s. 3d. Of these amounts the costs of the Indexing Dept. (including those of producing the 1939 Indexes, but excluding those due to the Quinquennial Index) were: A I and A II, £781 10s. 5d.; A III, £796 4s. 5d.; B, £991 17s. 2d.

Abstracts A III.—The agreement relating to the production of this section of the Abstracts terminated at the end of 1940, but as, in the opinion of the Societies concerned, this section of the Abstracts constitutes a valuable service to physiologists and biochemists, they decided unanimously to renew the agreement for a further three years. Despite an additional special grant of £200 from the Chemical Society and a grant of £50 from the Society of Chemical Industry, the production of these Abstracts showed a deficit of about £190 for the year, making a cumulative deficit of £388 for the three years' working. In order to meet this deficit and to ensure that this section of the Abstracts is maintained at its present standard, the Chemical Society agreed to increase its grant from £1300 to £1500 per annum, thus merging in the total grant the special contributions of £200 made in 1939 and 1940. The Physiological Society and the Biochemical Society each agreed to increase their grant by £100. It is hoped that, with the aid of this additional income and the increased subscription to the general public, it will be possible despite the probability of a reduction in the number of subscribers, to keep the expenditure within the income available and to eliminate the cumulative deficit during the next three years. The Bureau has recommended to the Chemical Society (which has since agreed to the recommendation) that in future the Accounts of Section A III of the Abstracts be issued as part of the Report of the Bureau and not as an appendix to the Report of the Council of the Chemical Society. The Accounts are appended hereto.

Abstracts Statistics.—The total number of abstracts published in 1940 was 28,779, as compared with 38,821 in 1939, a decrease of 10,023 (26%). The appended Table shows the number of abstracts and pages printed in each quarter of 1939 and 1940.

	A I.				A II.			
	1939.		1940.		1939.		1940.	
	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.
1st quarter	1882	164	1471	136	713	134	606	112
2nd ,,	2119	182	1525	138	875	160	734	130
3rd ,,	1688	154	1200	106	906	170	444	78
4th ,,	1430	128	747	68	574	102	335	66
	<u>7119</u>	<u>628</u>	<u>4943</u>	<u>448</u>	<u>3068</u>	<u>566</u>	<u>2119</u>	<u>386</u>
	A III.				B.			
	1939.		1940.		1939.		1940.	
	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.	No. of Abs.	Pages.
1st quarter	4394	344	3225	276	3803	334	2798	250
2nd ,,	3818	296	3442	274	3656	340	2719	252
3rd ,,	3157	246	2858	230	3623	332	2380	208
4th ,,	2959	228	2169	166	3219	298	2126	194
	<u>14,328</u>	<u>1114</u>	<u>11,694</u>	<u>946</u>	<u>14,306</u>	<u>1304</u>	<u>10,023</u>	<u>904</u>

Of the 10,223 B abstracts 5540 were from journal literature and 4583 were abstracts of Patents (8509 and 5797 respectively in 1939).

The large decrease in the numbers of abstracts in all sections is due to the non-receipt, since June, of any publications from the enemy-occupied parts of Europe. The greater part of the European journals (including those from Germany) were received up to June, but the Bureau was unable to secure these in all cases. Much of the deficiency has been made up from journals abstracted at the Patent Office Library or loaned by the Science Library.

Annual Indexes.—The decision reached in December, 1939, to publish separate indexes of the 1939 Abstracts A and B has resulted in substantial savings both in paper and in money. 255 reams less paper were used (245 against 482) and the cost was £849 less (£1803 against £2652). Whilst a small part of the saving was due to the decreased size of the abstracts, the greater part is attributed to the division of the Index into two parts.

Improvement of Abstracts.—During the year the Bureau made an exhaustive series of enquiries among the staffs of large organisations (who frequently use Abstracts B) with the object of eliciting criticisms and suggestions for improvement. A summary of the results indicated that there was a general opinion in favour of a smaller type and the numbering of columns instead of pages to facilitate reference. These suggestions were adopted by the Bureau, and as it seemed desirable to keep the format of Abstracts A and B uniform, the recommendation was referred to the various Societies supporting the work of the Bureau. All the Societies agreed to the proposed changes. The cost of setting this smaller type per 1000 ems will be the same as at present, but a saving of about 27% is expected on machining, binding, and paper. Abstractors' fees will remain the same per number of words, but the rate will be raised from 10s. to 13s. 9d. per column. It is intended to apply the money saved to the improvement of the Abstracts. More notice will be given in Section A I to new principles and ideas in abstracts of theoretical and mathematical papers.

The report mentioned above also recommended *inter alia* that some of the abstracts should be more informative, while certain sections needed to be more comprehensive and the abstracts of Patent literature should be extended. These proposals were adopted by the Bureau for recommendation to the Council of the Society of Chemical Industry, who agreed with all these suggestions. As regards the extension of the abstracting of Patents, it is realised that at present this can apply only to those of the Dominions and Colonies. The Council of the Society of Chemical Industry has been asked for specific suggestions for enlarging the scope of journals covering *Abstracts B*.

The report also suggested that the sub-headings of the Subject Indexes should be more strictly alphabetical in arrangement. The Indexer has been instructed to carry this out.

Sub-division of B Abstracts.—The Society of Chemical Industry has adopted the recommendation of the Bureau to publish *Abstracts B* separately from the *Transactions* and in three sections: B I, General and Inorganic Industrial Chemistry; B II, Organic Industrial Chemistry; B III, Agriculture, Foods, Sanitation, etc. This change will take effect at the beginning of 1941.

Indexing Staff.—The staff of the Indexing Department has hitherto been under the control, partly of the Bureau and partly of the Chemical Society, each body having made the appropriate payments directly to the staff for work done. With the approval of the Chemical Society, the Indexing staff has now been placed entirely under the control of the Bureau, which makes all payments directly to the staff, and is reimbursed by the Chemical Society for work done by the staff on their behalf. The same procedure will be followed in respect of the indexing work carried on for other bodies.

Quinquennial Index.—Despite the difficulties imposed by war conditions work on the *Quinquennial Index 1933—1937* has proceeded steadily during the year, and the Bureau is glad to announce that the first volume (Authors Names, 1964 pages) was completed at the end of the year. It is expected that the Subject Index will be published before the end of 1941. Sufficient paper for the whole work has been secured.

The number of books borrowed was 4307, against 4861 in the previous year, of these 1702 were issued by post, compared with 1444 in the preceding year.

The Library telephone facilities are still made use of, and the incoming calls included 741 enquiries which necessitated reference to books in the Library, as against 962 the previous year.

The additions to the Library comprise :

115 books, of which 40 were presented, 432 volumes of periodicals and 202 pamphlets, as against 251 books, 723 volumes of periodicals and 242 pamphlets, last year.

Analysis.

	Attendances.	Books borrowed.	Books added.	Volumes of periodicals.	Pamphlets.
1940	4381	4307	115	432	202
1939	7009	4861	251	723	242

The total number of volumes added during the year was 547. The Library now contains 44,193 volumes, consisting of 13,167 books and 31,026 bound volumes of periodicals.

The Committee wishes to record its grateful appreciation of the gifts received from Fellows and others during the year.

The Committee desires to place on record its keen appreciation of the valuable service Dr. Brady has rendered during his tenure of office as Chairman of the Joint Library Committee and in particular of his long-continued work in furtherance of co-operative support of the Library by the Societies which serve the interests of chemists in this country.

EXTRACTS FROM A REPORT OF THE JOINT LIBRARY COMMITTEE ON LIBRARY CO-OPERATION DURING TWENTY YEARS.

The scheme of Library co-operation between the various chemical bodies was initiated in 1919, and has thus been in operation a little over twenty years. The time, therefore, seems opportune to review the position.

In 1919 the Council of the Chemical Society offered to allow Members of a number of other chemical bodies to make use of the Library of the Chemical Society in return for voluntary contributions towards the cost of running the Library to be made by the societies accepting the offer on behalf of their members. This proposal was accepted by the Institute of Chemistry, the Society of Chemical Industry, and other Societies. Representation on the Library Committee of the Chemical Society was given to the contributing bodies and as these were largely concerned with chemical practice the policy of the Library Committee as regards the purchase of books was modified with the object of making the Library fully representative of all branches of pure and applied chemistry. Although previously books on technical chemistry had been acquired, from 1919 onwards the purchase of such works has been greatly extended.

In 1935 the setting up of the Chemical Council by agreement between the Chemical Society, the Institute of Chemistry, and the Society of Chemical Industry afforded an opportunity of closer co-operation between these three bodies in support of a national chemical library.

In practice, therefore, the Library of the Chemical Society became, for the period of the agreement, a national chemical Library under the management of the three societies as represented by the Chemical Council and the Joint Library Committee. All expenditure on maintenance is considered by the Joint Library Committee and submitted to the Chemical Council for its approval.

The cost of purchase of books, periodicals, binding, and furniture is met solely by the Chemical Society. The Joint Library Committee makes recommendations on these matters to the Council of the Chemical Society which authorizes the expenditure.

It is noteworthy that, so far, the Council of the Chemical Society has never denied the funds necessary for the purchase of all books recommended by the Joint Library Committee. In addition, the Chemical Society exchanges sets of its publications with

sets of chemical publications of other bodies all over the world; these are ultimately presented to the Library, and represent a very considerable additional contribution from the Chemical Society.

Finance.

Since the agreement between the three main bodies the Association of British Chemical Manufacturers and a number of other scientific societies have continued to make voluntary contributions towards the maintenance of the Library in return for privileges for their members. Their contributions, together with a grant of £150 from the Chemical Society, amounted to £382; the balance of £1535 being, in accordance with the agreement, devised as follows: Institute of Chemistry £718, the Society of Chemical Industry £410, and the Chemical Society £407.

The expenditure on maintenance represents a sum of the order of 2s. per member of the various societies, and for this sum they enjoy full use of one of the finest chemical Libraries in the world.

The Chemical Society in this year expended £722 on purchase of books, periodicals (other than those received in exchange), and binding, representing an additional expenditure of about 4s. per member.

Use of the Library.

The use of the Library has more than doubled in the twenty years under review. Compared with 1919, for which year the figures are given in brackets, in 1938 there were 8507 (3898) attendances; of these 4803 (3299) were by members of the Chemical Society, but many of them were also members of the Institute of Chemistry and/or the Society of Chemical Industry; 3704 (599) were by non-members of the Chemical Society, made up of 2709 (229) by members of the Institute of Chemistry, 704 (288) by members of the Society of Chemical Industry, and 291 (82) by members of other contributing bodies.

The total books borrowed were 5948 (2867), of which 1697 (929) were sent by post; of these 3429 (2549) were borrowed by members of the Chemical Society and 2519 (318) by non-members of the Chemical Society, made up of 1930 (161) by members of the Institute of Chemistry, 426 (143) by members of the Society of Chemical Industry, and 163 (14) by members of other contributing bodies.

Contents of the Library.

At the beginning of 1919 there were in the Library 6564 books and 16,753 bound volumes of periodicals; at the end of 1938 there were 12,801 books and 29,871 bound volumes of periodicals. At present the number of additions of bound volumes per annum is over 950. The Library covers every aspect of chemistry and is exceptionally strong in periodicals (as defined by the World List of Scientific Periodicals), the titles under this heading being 1022. No less than 127 of the important ones are in duplicate, and consequently available to borrowers. A photostat service is available by means of which readers can obtain copies of papers, etc., for their own personal use at reasonable cost.

It might be of interest to users of the Library if the procedure by which the Library is kept up to date is outlined. At every meeting of the Joint Library Committee a list of all the new books on pure and applied chemistry and related topics, British and foreign, published since the last meeting, is submitted by the Librarian, many of them are on the table for inspection. Previously some expert has been written to and asked to express an opinion on the value of the book. Each book is then considered individually and its purchase recommended or not. Sometimes the purchase of a book is postponed to discover if it is asked for by some reader. It is not the policy of the Committee to purchase every book and every new edition. Among the considerations which weigh with new books are, not necessarily in this order, (a) the report of the expert, (b) the distinction of the author, (c) the strength of the Library in this section, (d) the demand of readers for this particular type of book; with new editions the popularity of the previous edition and the amount of change are usually considered. The Librarian, from his reference cards, is able to supply the Committee with such information as it requires on these matters.

The Future.

The outbreak of war has made it impossible to foretell future developments. For some time now there has been no room for expansion of the Library at Burlington House. Room was found last year for the regular additions by storage of certain little-used journals available elsewhere in Burlington House, and the removal of certain valuable books to safer quarters as a war precaution has provided some temporary space. From now on, however, the efficiency of the Library must suffer until more accommodation is available. This matter has been engaging the serious attention of the Joint Library Committee and the Council of the Chemical Society for some time, and a number of alternative plans were under consideration; the crisis of September 1938 made progress difficult, and the present emergency has necessitated their temporary abandonment. The policy of the Joint Library Committee is to provide for British chemists the best possible Library facilities that present circumstances allow, and when better times arrive to press forward with their schemes for adequate accommodation.

APPENDIX C**LECTURES AND DISCUSSIONS.***Lectures given in London.*

18th January, on "New Views on Colloid Chemistry," by Professor J. D. Bernal; 15th February, "Urbain Memorial Lecture," by Dr. A. S. Russell; 4th April, "Sørensen Memorial Lecture," by Professor E. K. Rideal.

Lectures given outside London.

Birmingham. At the University, Edgbaston: 19th February, *Tilden Lecture* on "Recent Progress in the Chemistry of Plant Gums and Pectic Materials," by Professor E. L. Hirst; 22nd October, lecture on "The Constituents of Natural Phenolic Resins," by Professor R. D. Haworth.

Bristol. At the University (Joint Meeting with the Local Sections of the Institute of Chemistry and the Society of Chemical Industry): 29th February, lecture on "The Mechanism of the Synthesis of Large Molecules," by Dr. H. W. Melville; 3rd October, lecture on "By-Products of Industrial Research," by Dr. Gwyn Williams.

Edinburgh. At the North British Station Hotel (Joint Meeting with the Local Sections of the Institute of Chemistry and the Society of Chemical Industry): 22nd January, lecture on "Proteins under the X-Rays," by Dr. W. T. Astbury; at Heriot-Watt College (Joint Meeting with the Edinburgh University Chemical Society, the Institute of Chemistry, and the Society of Chemical Industry), 26th November, lecture on "The Chemical Exploration of the Stratosphere," by Professor F. A. Paneth.

Glasgow. Royal Technical College (Joint Meeting with the Local Sections of the Institute of Chemistry and the Society of Chemical Industry, the Alchemists Society and the Andersonian Chemical Society): 16th February, lecture on "Ionisation and its Chemical Significance," by Professor W. F. K. Wynne-Jones; at the University, 14th October, lecture on "Synthetic Oestrogens," by Professor E. C. Dodds; at the Royal Technical College, 15th November, lecture on "The Structure of Proteins," by Dr. W. T. Astbury.

Leeds. At the University: 14th October, lecture on "The Constituents of the Natural Phenolic Resins," by Professor R. D. Haworth.

Liverpool. At the University (Joint Meeting with the Liverpool University Chemical Society): 31st October, lecture on "Recent Work on the Chemistry of Protozoal Infections," by Professor Warrington Yorke.

Manchester. At the University (Joint Meeting with the Manchester Section of the Society of Chemical Industry and other Societies): 9th November, lecture on "Coal Rank and Structure," by Professor H. L. Riley.

North Wales. At University College, Bangor (Joint Meetings with the University College of North Wales Chemical Society) : 23rd February, lecture on "William Hyde Wollaston," by Mr. L. F. Gilbert; 8th March, lecture on "The Chemist in the Garden," by Mr. H. J. Evans.

Nottingham. At University College : 2nd February, lecture on "Application of Reaction Kinetics to Problems of Organic Chemistry," by Dr. H. B. Watson; at the Welbeck Hotel (Joint Meeting with the Local Section of the Institute of Chemistry and the Society of Chemical Industry), 7th March, lecture on "Hormones," by Professor E. C. Dodds; (Joint Meeting with the Local Section of the Institute of Chemistry), 14th November, lecture on "Stereochemistry and Valency Group," by Professor N. V. Sidgwick : at University College (Joint Meeting with the University College Physical and Chemical Society), 28th November, lecture on "Bivalent Hydrogen; Some New Aspects of Tautomerism," by Dr. L. Hunter.

St. Andrews and Dundee. At University College, Dundee : 25th November, lecture on "The Chemical Exploration of the Stratosphere," by Professor F. A. Paneth.

Sheffield. At the University : 19th February, *Tilden Lecture* on "The Present State of Valency Theory," by Dr. L. E. Sutton; 8th March, lecture on "Biological Applications of Synthetic Chemistry," by Professor J. W. Cook; (Joint Meeting with the Sheffield University Chemical Society), 8th November, lecture on "Reactions in Monolayers," by Professor E. K. Rideal.

South Wales.

Cardiff. At University College (Joint Meeting with the Chemical and Physical Society of University College of South Wales) : 16th February, lecture on "Recent Work in the Investigation of Molecular Structure," by Dr. F. G. Mann; (Joint Meeting with the Local Sections of the Institute of Chemistry and the Society of Chemical Industry), 18th October, lecture on "Some Recent Developments in Microchemistry," by Dr. Janet W. Matthews; (Joint Meeting with the Local Sections of the Institute of Chemistry and the Society of Chemical Industry), 7th December, lecture on "Some New Developments in the Petroleum Industry," by Mr. W. W. Williams.

Swansea. At the Royal Institution of South Wales (Joint Meeting with the University College of Swansea Chemical Society) : 9th November, lecture on "Fluorine: Some Recent Developments in the Chemistry of the Element and its Derivatives," by Dr. H. J. Emeléus; (Joint Meeting with the University College of Swansea Chemical Society and the Local Section of the Institute of Chemistry), 23rd November, lecture on "Some Aspects of Surface Action," by Professor E. K. Rideal.

INCOME AND EXPENDITURE GENERAL PURPOSES ACCOUNT FOR THE YEAR ENDED 31st DECEMBER, 1940.

1939		1940		1939		1940	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
Income.							
23	10 0	60	0 0	2389	14 5	255	18 6
To Life Composition Fees (£180 0s. 0d.), one-third as Income							
997	8 10	608	16 8	255	18 6	315	17 10
" Annual Subscriptions:							
2445	9 11	7522	4 11	84	0 0	84	0 0
" Received in advance, on account of 1940							
292	15 4	308	12 8	323	1 10	186	11 11
" during 1939 " " 1939							
23	7 6	3	12 2	77	7 2	186	11 11
" " " " 1938 and previous years							
3559	1 7	8503	6 5	3630	11 8	3630	11 8
Less Amount included in last year's Income, being valuation of Arrears as per last Balance Sheet							
320	0 0	270	0 0	320	0 0	320	0 0
8539	1 7	8233	6 5	170	0 0	170	0 0
270	0 0	270	0 0	199	15 1	150	0 0
Add Arrears at date: £797 18s. 6d. Estimated to realise as per Balance Sheet							
8809	1 7	8503	6 5	2790	16 7	2790	16 7
780	8 10	625	18 5	212	18 5	212	18 5
279	9 5	351	3 9	5	5 0	5	5 0
5	12 4	3	11 2	5618	10 5	5618	10 5
39	0 1	5	0 0	Expenses of Meetings			
321	9 9	45	11 6	" Donations			
" Excess of Expenditure over Income carried to Balance Sheet							
				1088	18 8	1088	18 8
				88	12 1	88	12 1
				1000	6 7	1000	6 7
				38	18 0	38	18 0
				200	0 0	200	0 0
				87	10 11	87	10 11
				5	17 6	5	17 6
				298	8 7	298	8 7
				£10,258 12 0			
				£10,258 12 0			
Expenditure.							
By Administration Expenses:							
Office Salaries and Wages							
Superannuation							
House Expenses, etc.							
Accountants' Charges							
Miscellaneous Printing and Stationery							
Postages							
Miscellaneous							
Less Transfer to Publications and Library:							
Journal							
Abstracts A I, A II							
" A III							
Library Account							
Expenses of Meetings							
" Donations							
" Contribution to Publications Fund							
" Contribution to Library Fund:							
For Fittings, Furniture, Books, Periodicals, and Binding							
For Aid Raid Precautions							
Proportion of Maintenance							
Less Balance from Library Account							
Transfer to Staff Pensions Fund							
Transfer to Centenary Fund							
Expenses of Local Representatives							
Legal Expenses							
Interest on Loans from other Funds							
Air Raid Precautions							
				2415	8 2	2415	8 2
				269	13 0	269	13 0
				314	8 11	314	8 11
				84	0 0	84	0 0
				291	1 0	291	1 0
				191	17 6	191	17 6
				53	11 4	53	11 4
				3609 19 11			
				934	4 7	934	4 7
				2675	15 4	2675	15 4
				35	19 5	35	19 5
				6	5 0	6	5 0
				6055	8 6	6055	8 6
				340	15 1	340	15 1
				68	3 8	68	3 8
				327	11 11	327	11 11
				756	10 8	756	10 8
				16	7 7	16	7 7
				£10,068 2 2			
				£10,068 2 2			

INCOME AND EXPENDITURE ACCOUNTS OF OTHER FUNDS FOR THE YEAR ENDED 31ST DECEMBER, 1940.

LIBRARY.

1939		1940		1939		1940	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
605	7 0	340	15 1	573	10 0	208	6 1
200	0 0	200	0 0	80	0 0	200	0 0
805	7 0	540	15 1	151	17 0	132	9 0
136	15 7	68	3 8	136	15 7	68	3 8
346	16 1			1443	10 0	1465	19 6
715	5 9			177	15 6	181	1 0
382	18 8			14	15 8	17	12 10
250	0 0			8	1 5	7	16 2
1695	0 6			199	15 1	163	19 11
				1843	17 8	1836	9 5
				88	12 1	16	7 7
100	0 0						
21	0 0						
26	5 0						
50	0 0						
10	10 0						
21	0 0						
3	0 0						
6	14 3						
237	9 3	237	14 4				
£2874	12 4	£2461	15 9	£2874	12 4	£2461	15 9

* Other than those received in exchange.

INCOME AND EXPENDITURE ACCOUNTS OF OTHER FUNDS FOR THE YEAR ENDED 31ST DECEMBER, 1940.

RESEARCH FUND.		
	1939	1940
	£ s. d.	£ s. d.
Income.		
To Dividends on Investments	448 5 9	438 2 7
" Income Tax recovered	163 13 4	294 4 11
" Repayment of Grants	94 3 9	67 9 8
" Grants not applied for	10 0 0	4 0 0
" Interest on Deposit	12 4 6	5 11 10
" Interest on Loan to General Purposes Account	3 3 9	3 11
" Sale of Apparatus	—	4 9 2
	<u>£728 11 1</u>	<u>£744 2 1</u>
Expenditure.		
By Honorarium, Longstaff Medallist	20 0 0	...
" Longstaff Medal	2 0 0	...
" Grants	404 0 0	...
" Miscellaneous Expenses	8 9 11	...
" Balance, being Excess of Income over Expenditure, carried to Balance Sheet	294 1 2	...
	<u>£744 2 1</u>	<u>£744 2 1</u>

SPECIAL PUBLICATIONS FUND.

	1939	1940
	£ s. d.	£ s. d.
Income.		
To Sales of Publications:		
Memorial Lecture, Vol. I.	6 15 3	...
Do, Vol. II.	5 9 0	...
Do, Vol. III.	7 16 9	...
Faraday Lectures	3 9 6	...
Portraits	1 8 10	...
Other publications	1 1 9	...
" Dividend on Investments	22 19 1	25 10 1
" Interest on Deposit	74 0 8	74 0 8
" Interest on Loan to General Purposes Account	2 6 0	3 19 11
	<u>£100 15 1</u>	<u>£104 2 1</u>
Expenditure.		
By Reprints for Memorial Lectures, Vol. IV.	13 3 8	...
" Reprints for Faraday Lectures, Vol. II.	87 11 5	...
" Excess of Income over Expenditure carried to Balance Sheet	...	...
	<u>£104 2 1</u>	<u>£104 2 1</u>

INCOME AND EXPENDITURE ACCOUNTS OF OTHER FUNDS FOR THE YEAR ENDED 31ST DECEMBER, 1940.

SPECIAL LECTURES FUND.

1939		1940		1939		1940		
£	s. d.	£	s. d.	£	s. d.	£	s. d.	
39	2 5	To Dividends on Investments	35	13 0	26	0 0	By Honorarium	...
6	7 1	" Income Tax recovered	8	1 10	9	2 0	" Lecture Expenses	...
18	3	" Interest on Deposit	17	0	12	6 10	" Balance, being Excess of Income over Expenditure, carried to Balance Sheet	...
1	1	" Interest on Loan to General Purposes Account	—	—	—	—	"	...
<u>£46 8 10</u>		<u>£44 11 10</u>		<u>£46 8 10</u>		<u>£44 11 10</u>		

STAFF PENSIONS FUND.

1939		1940		1939		1940		
£	s. d.	£	s. d.	£	s. d.	£	s. d.	
38	18 0	To Transfer from General Purposes Account	38	17 10	80	0 0	By Pension paid during 1940	...
36	19 10	" Dividends on Investments	34	12 0	—	—	"	...
6	2 2	" Income Tax recovered	6	10 2	—	—	"	...
<u>£80 0 0</u>		<u>£80 0 0</u>		<u>£80 0 0</u>		<u>£80 0 0</u>		

THE EDWARD FRANK HARRISON MEMORIAL TRUST FUND.

1939		1940		1939		1940		
£	s. d.	£	s. d.	£	s. d.	£	s. d.	
38	11 2	To Dividends on Investments	32	5 6	150	0 0	By Harrison Prize	...
13	16 0	" Income Tax recovered	17	11 4	6	15 0	" Harrison Plaque	...
14	5	" Interest on Deposit	10	11	—	—	" Balance, being Excess of Income over Expenditure, carried to Balance Sheet	...
103	13 5	" Excess of Expenditure over Income, carried to Balance Sheet	—	—	—	—	"	...
<u>£186 15 0</u>		<u>£60 7 9</u>		<u>£156 15 0</u>		<u>£60 7 9</u>		

INCOME AND EXPENDITURE ACCOUNTS OF OTHER FUNDS FOR THE YEAR ENDED 31ST DECEMBER, 1940.

CENTENARY FUND.

		1939		1940		1940	
		<i>Income.</i>				<i>Expenditure.</i>	
£	s. d.	£	s. d.	£	s. d.	£	s. d.
5	5	0	0	62	10	0	0
200	0	0	0	160	17	1	0
14	19	7	0				
3	2	6	0				
<u>£223 7 1</u>		<u>£223 6 9</u>		<u>£223 7 1</u>		<u>£223 6 9</u>	
To Donations	...	...	...	By Honorarium	...	...	...
" Contribution from General Purposes Account	...	...	...	" Excess of Income over Expenditure carried to Balance Sheet	...	...	...
" Interest on Deposit in Post Office Savings Bank and London Savings Bank	...	...	...	
" Interest on Loan to General Purposes Account	...	...	...	

THE HERBERT SPENCER BEQUEST.

		1939		1940			
		<i>Income.</i>					
£	s. d.	£	s. d.	£	s. d.		
4	14	1	0	200	0	0	
1	0	10	0	19	7	7	
216	0	1	0	3	19	2	
<u>£221 15 0</u>		<u>£221 18 0</u>		<u>£221 15 0</u>		<u>£221 15 0</u>	
To Interest on Deposit in Post Office Savings Bank and London Savings Bank	...	...	...	By Transfer to Library Account for purchase of Books	...	...	...
" Interest on Loan to General Purposes Account	...	...	...	" Purchase of Office Furniture	...	...	...
" Excess of Expenditure over Income carried to Balance Sheet	...	...	...	

THE FARADAY LECTURE FUND.

		1939		1940			
		<i>Income.</i>					
£	s. d.	£	s. d.	£	s. d.		
9	10	4	0	11	6	5	
1	16	1	0	4	11	10	
<u>£11 6 5</u>		<u>£12 2 10</u>		<u>£12 2 10</u>		<u>£12 2 10</u>	
To Dividends on Investments	...	...	...	By Excess of Income over Expenditure carried to Balance Sheet	...	...	...
" Income Tax recovered	...	...	...	

THE TILDEN LECTURE FUND.

		1939		1940			
		<i>Income.</i>					
£	s. d.	£	s. d.	£	s. d.		
5	16	9	0	15	15	0	
8	8	0	0	20	6	9	
5	5	2	0	7	6	0	
<u>£60 9 11</u>		<u>£60 16 10</u>		<u>£60 9 11</u>		<u>£68 16 10</u>	
To Dividends on Investments	...	...	...	By Honorarium	...	...	...
" Income Tax recovered	...	...	...	" Lecture Expenses	...	...	...
" Interest on Deposit	...	...	...	" Transfer to General Purposes Account, for cost of publication of Lecture	...	...	...
				" Excess of Income over Expenditure carried to Balance Sheet	...	...	...

THE CHEMICAL SOCIETY. BALANCE SHEETS, 31ST DECEMBER, 1940.

PUBLICATIONS FUND.

Liabilities.		Assets.	
1939	1940	1939	1940
£ s. d.	£ s. d.	£ s. d.	£ s. d.
9363 3 10	To Excess of Assets over Liabilities as per last Balance Sheet	9363 3 10	By Investment as per Schedule (cost or value when acquired)
			18,275 18 0
			700 0 0
			245 15 4
			1600 0 0
			1 10 5
			600 0 0
			99 13 6
			£2301 3 11
			£9363 3 10

RESEARCH FUND.

Liabilities.		Assets.	
1939	1940	1939	1940
£ s. d.	£ s. d.	£ s. d.	£ s. d.
14,749 19 10	To Sundry Creditors	16,675 18 0	By Investments as per Schedule (cost or value when acquired)
2,000 0 0	" Excess of Assets over Liabilities as per last Balance Sheet	400 0 0	" Sundry Debtors
16,749 19 10	Add Amount received from Trustees of W. S. Gilles—Legacy	318 3 0	" Loan to General Purposes Account
294 1 2	Add Excess of Income over Expenditure for year		" Cash at Bank
			18,275 18 0
			700 0 0
			245 15 4
			1600 0 0
			1 10 5
			600 0 0
			99 13 6
			£2301 3 11
			£17,394 1 0

SPECIAL PUBLICATIONS FUND.

Liabilities.		Assets.	
1939	1940	1939	1940
£ s. d.	£ s. d.	£ s. d.	£ s. d.
2191 13 0	To Sundry Creditors	1600 0 0	By Investment as per Schedule (cost or value when acquired)
87 11 5	" Excess of Assets over Liabilities as per last Balance Sheet	550 0 0	" Sundry Debtors
2209 4 5	Add Excess of Income over Expenditure for year	72 8 1	" Loan to General Purposes Account
			" Cash at Bank
			1600 0 0
			1 10 5
			600 0 0
			99 13 6
			£2301 3 11
			£2222 8 1

THE CHEMICAL SOCIETY. BALANCE SHEETS, 31st DECEMBER, 1940.

SPECIAL LECTURES FUND.

		1940		1939		Assets.		1940	
£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1102	11 11	1114	18 9	1000	0 0	By Investment as per Schedule (cost or value when acquired)	...	1000	0 0
12	6 10	44	11 10	114	18 9	Loan to General Purposes Account	...	100	0 0
						Cash at Bank	...	89	10 7
				1159	10 7				
				<u>£1159</u>	<u>10 7</u>			<u>£1159</u>	<u>10 7</u>

STAFF PENSIONS FUND.

		1940		1939	
£	s. d.	£	s. d.	£	s. d.
907	14 0	907	14 0	902	13 9
				5	0 3
				<u>£907</u>	<u>14 0</u>

THE EDWARD FRANK HARRISON MEMORIAL TRUST FUND.

		1940		1939		Assets.		1940	
£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1286	0 11	1162	7 6	1101	7 11	By Investments as per Schedule (cost or value when acquired)	...	1101	7 11
				60	19 7	" Cash at Bank	...	111	7 4
103	13 5	50	7 9						
				1212	15 3				
				<u>£1162</u>	<u>7 6</u>			<u>£1212</u>	<u>15 3</u>

THE CHEMICAL SOCIETY. BALANCE SHEETS, 31st DECEMBER, 1940.

CENTENARY FUND.			
1939		1940	
£	s. d.	£	s. d.
617	8 0	778	5 1
160	17 1	223	6 9
		1001	11 10
		£1001	11 10
		£778	5 1
To Excess of Assets over Liabilities as per last Balance Sheet			
Add Excess of Income over Expenditure for year			
		778	5 1

CENTENARY FUND.			
1939		1940	
£	s. d.	£	s. d.
750	0 0	750	0 0
6	16 4	6	16 4
21	8 9	21	8 9
		£778	5 1
By Loan to General Purposes Account			
" Sundry Debtors			
" Cash at Bank			
" Cash on Deposit in Post Office Savings Bank and London Savings Bank			
		£1001	11 10

THE HERBERT SPENCER BEQUEST.

473	7 7	257	7 6
216	0 1	232	18 0
		24	9 6
		£24	9 6
To Balance unexpended at 31st December, 1939			
Less Excess of Expenditure over Income for year			
		257	7 6
		£257	7 6

250	0 0	250	0 0
1	10 2	1	10 2
5	17 4	5	17 4
		£257	7 6
By Loan to General Purposes Account			
" Sundry Debtor			
" Cash at Bank			
" Cash on Deposit at Post Office Savings Bank and London Savings Bank			
		£257	7 6

THE FARADAY LECTURE FUND.

369	6 8	380	13 1
11	6 5	12	2 10
		392	15 11
		£392	15 11
To Excess of Assets over Liabilities as per last Balance Sheet			
Add Excess of Income over Expenditure for year			
		380	13 1
		£380	13 1

369	4 0	369	4 0
11	9 1	11	9 1
		£380	13 1
By Investment as per Schedule (cost or value when acquired)			
" Cash at Bank			
		£392	15 11

THE TILDEN LECTURE FUND.

1492	2 0	1878	18 7
342	15 9		
44	0 10	37	10 8
		1916	9 3
		£1878	18 7
To Excess of Assets over Liabilities as per last Balance Sheet			
Add Balance of Legacy received from Executors			
Add Excess of Income over Expenditure for year			
		1878	18 7
		£1878	18 7

1834	10 6	1834	10 6
44	8 1	44	8 1
		£1916	9 3
By Investments as per Schedule (cost or value when acquired)			
" Cash at Bank			
		£1916	9 3

Assets.

3	19 2	3	19 2
6	16 4	6	16 4
990	16 4	990	16 4
		£1001	11 10

—	4 2	—	4 2
1	15 2	1	15 2
22	15 2	22	15 2
		£24	9 6

369	4 0	369	4 0
23	11 11	23	11 11
		£392	15 11

1834	10 6	1834	10 6
81	18 9	81	18 9
		£1916	9 3

SCHEDULE OF INVESTMENTS.

GENERAL PURPOSES.		RESEARCH FUND.			THE FARADAY LECTURE FUND.		
Nominal Details.		Nominal Details.			Nominal Details.		
Cost or Value when Acquired.	Market Value 31st December, 1940.	Value when Acquired.	Market Value 31st December, 1940.	Value when Acquired.	Market Value 31st December, 1940.	Value when Acquired.	Market Value 31st December, 1940.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
£787 London, Midland and Scottish Railway 4% Debenture Stock	783 1 4	£1000 London and North Eastern Railway 4% 2nd Guaranteed Stock	1010 0 0	£374 19s. 0d. 3½% Conversion Stock, 1961, or after	£369 4 0	£1080 5s. 5d. 3½% Conversion Stock, 1961, or after	1043 3 7
£1820 14s. 3d. Cardiff Corporation 3% Stock, 1914/54	1414 5 3	£1034 Great Western Railway 2½% Debentures	1049 15 11	£2115 8s. 10d. 3½% Conversion Stock, 1961, or after	£1600 0 0	£1096 6s. 2d. Union of South Africa 3% Stock, 1954/64	£18,757 14 2
£1400 India 2½% Stock	984 0 0	£1122 Metropolitan Water Board 3% "B" Stock	1002 16 9	SPECIAL PUBLICATIONS FUND.			
£2400 Bristol Corporation 2½% Debenture Stock, 1957	1318 1 0	£1483 London, Midland and Scottish Railway 4% Debenture Stock	1508 3 6	SPECIAL LECTURES FUND.			
£2713 London, Midland and Scottish Railway 4% Preference Stock	2070 2 0	£806 Victoria 3% Stock, 1929/49	706 6 2	STAFF PENSIONS FUND.			
£1900 Leeds Corporation 3% Stock	1397 3 11	£4408 11s. 0d. 5% Conversion Stock, 1944/64	4267 4 10	THE EDWARD FRANK HARRISON MEMORIAL TRUST FUND.			
£1096 6s. 2d. Union of South Africa 3% Stock, 1954/64	1143 1 0	£10,080 5s. 5d. 3½% Conversion Stock, 1961, or after	8731 10 10	THE FARADAY LECTURE FUND.			
£1900 London and North Eastern Railway 3% Debenture Stock	1087 12 10				THE FARADAY LECTURE FUND.		
£3639 8s. 9d. 5% Conversion Stock, 1960/90	1033 11 0				THE FARADAY LECTURE FUND.		
£680 4% Funding Stock, 1944/64	3491 2 8				THE FARADAY LECTURE FUND.		
£11,426 15s. 0d. 3½% Conversion Stock, 1961, or after	480 0 0				THE FARADAY LECTURE FUND.		
£408 2s. 6d. 3% Funding Stock, 1959/69	8874 2 2				THE FARADAY LECTURE FUND.		
	394 11 5				THE FARADAY LECTURE FUND.		
	£25,931 8 0				THE FARADAY LECTURE FUND.		
	£26,294 7 2				THE FARADAY LECTURE FUND.		
PUBLICATIONS FUND.					THE FARADAY LECTURE FUND.		
£5260 19s. 9d. 3½% Conversion Stock, 1961, or after	3645 12 8				THE FARADAY LECTURE FUND.		
£3173 1s. 6d. 5% Conversion Stock, 1944/64	3199 18 7				THE FARADAY LECTURE FUND.		
£817 P. & O. Steam Navigation Co. Deferred Stock	2060 0 0				THE FARADAY LECTURE FUND.		
£803 London, Midland and Scottish Railway 4% Guaranteed Stock	457 12 7				THE FARADAY LECTURE FUND.		
	£9363 3 10				THE FARADAY LECTURE FUND.		
THE TILDEN LECTURE FUND.					THE FARADAY LECTURE FUND.		
£532 London Transport "B" 5% Stock	625 2 0				THE FARADAY LECTURE FUND.		
186 National Provincial Bank Shares £5 each, £1 paid "B"	678 18 0				THE FARADAY LECTURE FUND.		
£230 Metropolitan Water Board (Kens Water Works) 3% Deb. Stock	188 2 0				THE FARADAY LECTURE FUND.		
£376 3s. 5d. 3% Funding Stock, 1959/69	342 8 6				THE FARADAY LECTURE FUND.		
	£1884 10 6				THE FARADAY LECTURE FUND.		
SPECIAL RESERVE FUND.					THE FARADAY LECTURE FUND.		
£800 3% Defence Bonds	£800 0 0				THE FARADAY LECTURE FUND.		

We have examined the above Balance Sheets and accompanying Income and Expenditure Accounts with and Vouchers of the Society, and certify them to be in accordance therewith. We have also verified the Balances at the Bankers and the Investments. Certain figures relating to the Bureau of Chemical and Physiological Abstracts have not yet been subjected to audit by the Auditors of the Bureau and are therefore liable to adjustment.

23, QUEEN VICTORIA STREET, E.C. 4.
13th March, 1941.

F. P. DUNN, Treasurer.

W. B. KEENE & Co.,
Chartered Accountants.