

# REPORT OF THE BUREAU OF ABSTRACTS FOR THE YEAR 1945.

## 1. *Introduction.*

No apology is needed for the length of the report for the year 1945. In the first place, the Bureau has been incorporated and, secondly, the importance of abstracting (always understood by those who sponsored the work during the past twenty-one years) is becoming more and more recognised. Government Departments and Industry have realised that abstracting is not only an important aid to the scientific worker, but is also a potent factor in the development of Trade. The members of the Board in common with many other scientists, both industrial and academic, realise that there is no division between "pure" and "applied" science. The constant survey of the vast field of science which comes within their purview stresses the conviction that the inextricable mingling of the paths of investigation defies any rigid classification into "pure" and "applied." Thus, studies on the nutritional value of a food may appear in the *Biochemical Journal* or in the *Journal of the Society of Chemical Industry*; in the one case it is regarded as "pure," and is therefore abstracted in *A Abstracts*, and in the second case as "applied," and appears in *B Abstracts*. Moreover, the synthesis of a compound reported in the *Journal of the Chemical Society* may form one part of an investigation, whilst a second part dealing with the applications of the compound may be reported in the *Journal of the Society of Chemical Industry*. To-day so many groups of scientists find it imperative to follow closely the progress of all sides of their subject that the purely artificial and arbitrary division of Abstracts and Indexes into two sections, so-called "pure" and "applied," involves some considerable extra labour and trouble. There is obviously a case for merging the A and B Abstracts, and this problem is receiving the attention of the Bureau.

## 2. *Incorporation.*

The negotiations with the Board of Trade about incorporation were more prolonged than had at first been expected, and it was not until June 22, 1945, that the Bureau became an incorporated body under the Companies Act 1929. This report accordingly covers the last six months of the existence of the Bureau in its original form as a joint committee and the first six months of its corporate existence as a separate entity. The Bureau wishes to record its appreciation of the labours of the Hon. Treasurer and the Solicitors in securing the completion of the incorporation and in the arduous task of preparing the Memorandum and Articles of Association.

The Bureau is now furnishing reports of the monthly meetings of the Board of Directors to the Supporting Societies, and also to the Chemical Council, and these reports are being published in *Chemistry and Industry*. The Bureau is informed that this has been much appreciated.

## 3. *Finance.*

Agreements have been entered into between the Bureau and the Chemical Society, the Society of Chemical Industry, the Physiological Society, and the Biochemical Society, providing for the payment of appropriate sums to the Bureau to cover current expenditure.

The Bureau has once again to record, with great appreciation, the receipt of a grant (£1500) from the Chemical Council in aid of the work of preparing the Abstracts for 1945. This generous gift is yet another token of the very practical interest which the Chemical Council has always evinced in the work of the Bureau.

## 4. *Directors and Members.*

The Board of Directors at the time of the incorporation consisted of the following: Dr. L. H. Lampitt (Chairman), Prof. B. A. McSwiney (Vice-Chairman), Mr. F. P. Dunn (Hon Treasurer), Mr. J. L. Baker, Dr. G. M. Bennett, Mr. H. W. Cremer, Dr. E. B. Hughes, Dr. L. A. Jordan, Dr. E. H. Rodd, Prof. S. Wright, Prof. F. G. Young. Prof. Young resigned his Directorship in July, and Dr. R. L. M. Syngé has been appointed on nomination by the Biochemical Society to take his place. Two additional Directors were co-opted by the Board in August under Article 53—namely, Mr. E. J. Bowen and Dr. H. McCombie.

In addition to the Directors, the following have been appointed members of the Bureau by the Societies named: Chemical Society: Mr. R. P. Bell, Prof. H. V. A. Briscoe, Prof. G. A. R. Kon, Prof. W. Wardlaw; Society of Chemical Industry: Mr. E. B. Anderson, Dr. R. T. Colgate, Dr. H. McCombie, Prof. E. K. Rideal; Physiological Society: Prof. E. D. Adrian, Prof. H. P. Gilding; Biochemical Society: Dr. J. H. Bushill.

5. *Committees of the Bureau.*

The following is a list of the Committees appointed by the Bureau since its incorporation. (The Chairman, Vice-Chairman, and Hon. Treasurer are *ex officio* members of all Committees.)

FINANCE COMMITTEE:	Chairman, Vice-Chairman, Honorary Treasurer.
A I ABSTRACTS	E. J. Bowen (Convener), H. J. T. Ellingham, W. Jevons, H. W. Thompson, A. J. E. Welch.
A II ABSTRACTS	G. M. Bennett (Convener), G. A. R. Kon, H. McCombie, E. H. Rodd.
A III ABSTRACTS	S. Wright (Convener), J. L. Baker, R. L. M. Synge.
B ABSTRACTS	L. A. Jordan (Convener), A. L. Bacharach, H. W. Cremer, E. B. Hughes, F. M. Potter, V. Slater.
C ABSTRACTS	E. B. Hughes (Convener), B. S. Cooper, R. C. Chirnside, E. J. King.
INDEXING	E. H. Rodd (Convener), G. M. Bennett, C. L. Bird, E. J. Bowen, L. A. Jordan, G. A. R. Kon, J. H. Lane, C. Rimington, S. Wright.

6. *Publicity.*

The preparation of Brochure No. 1, entitled "The Bureau of Abstracts. What it is and what it offers," was almost completed by the end of 1945. Before final approval this document was carefully revised so that it should give a clear idea of the work and policy of the Bureau in an attractive form.

7. *Editorial Arrangements.*

From the time the Bureau was formed, the Secretary and Editor (Mr. T. F. Burton) had been responsible for editing the *Transactions* and *Annual Reports* of the Society of Chemical Industry. During the year the Society of Chemical Industry appointed a new Editor to be in charge of all its publications, and as from July 1st, Mr. Burton has devoted the whole of his time to the work of the Bureau.

Early in the year, Dr. E. E. Turner and Dr. H. Wren resigned their positions as Assistant Editors of Section A II, Organic Chemistry, which they had filled with conspicuous ability since the Bureau was formed in 1924. The Bureau desires to place on record its appreciation of their long and valuable services. The whole of the editing of Section A II has been placed in the hands of Dr. Harold Burton. A panel of four experienced organic chemists (Drs. F. E. King, C. W. Shoppee, J. C. Simpson, and L. F. Wiggins) are helping Dr. Burton in an advisory capacity with the abstracts of papers in certain branches of organic chemistry.

8. *Changes in Abstracts.*

A I. Realising that the classification of *Abstracts A I* (General, Physical, and Inorganic Chemistry) was not in complete harmony with recent progress in these branches of science, the Bureau adopted a revised classification which is believed to be more in keeping with modern ideas, and the Abstracts for 1946 will accordingly be subdivided under the following headings: i. Mathematical Theory. ii. Sub-Atomics and Atomic Structure. iii. Physical Properties and Molecular Structure of Single Substances. iv. Physical Properties and Molecular Structure of Solutions and Mixtures (not Electrochemical). v. Chemical Equilibria and Kinetics. vi. Electrochemical Equilibria and Kinetics. vii. Preparation of Inorganic Substances. viii. General Reviews and Summaries. History. Lecture Experiments. ix. Geochemistry. (Full details of the classification are set in the Foreword of the 1946 Abstracts.)

A II. An important improvement has been made in this Section by each abstract beginning with an introductory paragraph describing the general nature and the results of the investigations recorded. It is believed that this feature has been much appreciated and has increased considerably the value of the abstracts of papers in Organic Chemistry.

The following changes in detail have been approved and will take effect in 1946: (i) physical constants in addition to m. p., b. p., and rotation will be quoted in future; (ii) aliphatic compounds with chains of more than 5 carbon atoms will be numbered (instead of giving Greek letters); (iii) the "delta" sign to denote unsaturated compounds will be abolished and the appropriate Greek letter or number will be inserted in the name of the compound immediately preceding the syllable which defines the unsaturated linking.

A III. Class xxv of this Section (Fungi. Micro-organisms. Immunology. Allergy) has been heavily overloaded and also contains a number of abstracts on widely varying aspects of these subjects. In the 1946 Abstracts, this Class will be divided into two: xxv, Biochemistry of Micro-organisms, including Fungi, and xxvi, Pathogenic Aspects of Micro-organisms. Immunology. Allergy. Parasitology. The remaining Classes will be renumbered accordingly.

In future the cross-references in A III to other sections of the Abstracts will be replaced by short abstracts.

Dr. F. G. Young is no longer able to assist in the editing of the Ductless Glands Section; this Section, and also that on Reproduction, are now in charge of Dr. J. M. Robson of Edinburgh.

B. The Bureau has been fortunate in securing a number of experts to serve on an Advisory Panel to assist the Editorial staff in the three Sections of *Abstracts B*. The constitution of the Panel is as follows :

ACIDS, ALKALIS, ETC. ....	Dr. R. E. Slade
AGRICULTURE .....	Sir Frank Engledow, F.R.S.
BUILDING MATERIALS .....	Dr. R. E. Stradling, F.R.S.
CERAMICS .....	Dr. H. W. Webb
CHEMICAL ENGINEERING .....	Mr. J. A. Reavell
FERMENTATION .....	Prof. R. H. Hopkins
FIBRES AND CELLULOSE .....	Sir Robert Pickard, F.R.S.
FOODS AND MEDICINAL PRODUCTS .....	Sir Jack Drummond, F.R.S.
FUEL AND GAS .....	Sir Alfred Egerton, F.R.S.
GLASS .....	Prof. W. E. S. Turner, F.R.S.
INSECTICIDES .....	Sir Ian Heilbron, F.R.S.
MICROBIOLOGY .....	Prof. H. Raistrick, F.R.S.
METALLURGY AND EXPLOSIVES .....	Dr. W. Cullen
MINERAL OILS .....	Sir Frank Smith, F.R.S.
NON-FERROUS METALLURGY .....	Prof. C. H. Desch, F.R.S.
OILS AND FATS .....	Prof. T. P. Hilditch, F.R.S.
PAINTS AND VARNISHES .....	Mr. C. A. F. Hastilow
PHOTOGRAPHY .....	Dr. H. Baines
PLASTICS .....	Mr. H. V. Potter
RUBBER .....	Dr. D. F. Twiss
SUGARS AND STARCHES.....	Prof. W. N. Haworth, F.R.S.
VEGETABLE PRODUCTS .....	Prof. A. C. Chibnall, F.R.S.

Already many valuable suggestions and comments have been received from these advisers, which will undoubtedly lead to improvement in all the Sections of *Abstracts B*.

C. This Section of the *Abstracts* (Analytical) continues to maintain its size and usefulness. In view of the large number of abstracts in class iii (Physiology, Biochemistry, etc.) and class iv (General Technique and Laboratory Apparatus) it has been decided that appropriate subheadings shall be inserted in these classes in the 1946 *Abstracts*.

#### 9. *Indexing.*

The Bureau appreciates that the adequate indexing of the *Abstracts* is a matter of the utmost importance, since the value of the *Abstracts* as a work of reference depends very largely on the efficiency of the indexing. The Board has accordingly appointed a Committee to report on means whereby the indexing of the various Sections of the *Abstracts* may be improved. This Committee has been strengthened by the inclusion of Mr. C. L. Bird (nominated by the Society of Dyers and Colourists) and Mr. J. H. Lane (nominated by the Society of Public Analysts).

An important change in the 1946 Indexes, which it is believed will be approved by all organic chemists, is the inclusion of a Formula Index of organic compounds covering all the Sections of the *Abstracts*. This index will contain the formulæ of all new organic compounds, and also of those of which new properties or reactions are recorded, together with the appropriate *Abstracts* page reference.

#### 10. *Statistics.*

Appendix 2 shows the number of abstracts which have appeared in the various Sections for 1945, with the figures for 1944 for comparison. It will be noted that the major increases are in A III and C, with smaller increases in A I and A II, whereas there is a small decrease in all Sections of B.

The increases in A I, A II, A III, and C are due chiefly to the inclusion of abstracts from a number of continental journals which were not previously available. The increases in numbers of abstracts, though small, are particularly gratifying, in view of the gradual decline which had been noted in recent years. It will be observed that the total number of pages of abstracts printed shows an increase of nearly 10%.

The Bureau realises that, with the ever-increasing developments in science and industry, the field covered by the *Abstracts* must increase, and consequently the list of journals abstracted must be continually expanded and new abstractors recruited. In order to obtain expert advice on these points, the Chemical Society and the Society of Chemical Industry have, at the request of the Bureau, asked their Local Sections and Groups to offer suggestions as to new journals which might usefully be added to the list of those already abstracted, and also to submit names of possible new abstractors. Valuable suggestions have already been received from these sources.

#### 11. *Paper.*

It is not necessary to stress the difficulties which the Bureau, in common with all other Publishing Societies, has had owing to the shortage of paper. The Board, however, is pleased to be able to report

that the Paper Controller, taking into account the importance of the work carried out by the Bureau, has agreed to allot more paper for this work, and consequently the Bureau should be in a position to cope with the war-time journals which are now coming to hand.

### 12. Offices.

Since its formation in 1924 the Bureau has been housed in the offices of the Society of Chemical Industry, first at Finsbury Square, then at Clifton House (with an interlude at the Royal School of Mines owing to enemy action), and later at 56, Victoria Street. During the year the Bureau was informed by the Society of Chemical Industry that the whole of the Victoria Street offices would be required by the Society for immediate developments. At about the same time the Conjoint Chemical Office and the Indexing Department were faced with the necessity of removing from Burlington Gardens, and through the Chemical Society accommodation was found at 9—10 Savile Row, in which it was possible to house the whole of the staffs of the Conjoint Office and the Bureau and its indexing department. Although the present accommodation is inadequate and affords no facilities for expansion, the housing of all these departments in the same premises has proved a very great advantage, and it is hoped that extended accommodation may be available shortly.

### 13. Appendix 2.

The figures given in the appended Table show the number of abstracts and pages printed in each section during 1945, with comparative figures for 1944.

	1944.		1945.	
	No. of Abstracts.	Pages.	No. of Abstracts.	Pages.
A I .....	2472	148	2616	172
A II .....	1466	192	1515	210
A III .....	7554	428	8070	452
B I .....	4020	210	3798	202
B II .....	3124	192	3065	202
B III .....	2417	134	2262	132
C .....	2086	104	2739	150
	<u>23,139</u>	<u>1408</u>	<u>24,065</u>	<u>1520</u>

The above figures for *B* include abstracts of patents as follows : 1944, B I 2438, B II 2124, B III 548 (total 5107) ; 1945, B I 2198, B II 2001, B III 577 (total 4776).

THE BUREAU OF ABSTRACTS.

BALANCE SHEET, 31ST DECEMBER, 1945.

<i>Liabilities.</i>		<i>Assets.</i>	
£	s. d.	£	s. d.
A Company limited by Guarantee and not having a Share Capital.			
<i>Abstracts A I and A II, B I, B II, and B III, and C.</i>			
Sundry Creditors	3970 19 11		
External Sales of Publications, prepaid	2284 3 2		
<i>General Reserve Account.</i>			
As at 1st January, 1945	2000 0 0		
Add Contribution from The Chemical Council	1500 0 0		
	3500 0 0		
<i>Abstracts A I and A II, B I, B II, and B III, and C.</i>			
Sundry Debtors	268 5 11		
The Chemical Society, balance at 1st January, 1945	1333 16 11		
Net amount due for Sales of Abstracts—less payments for printing, etc.	1602 2 10		
Add Excess of Expenditure over Income—Abstracts A I and A II	2464 13 7		
Proportion of cost of Abstracts C	531 18 9		
	4598 15 2		
<i>Less Payments during year</i>	£ 268 5 11		
do	1760 13 8		
	2028 19 7		
	1372 9 1		
The Society of Chemical Industry, balance at 1st January, 1945	2147 0 2		
Add Net amount due for External Sales—less payments for printing, etc.	2626 15 11		
Excess of Expenditure over Income—Abstracts B I, B II, and B III	688 7 9		
Proportion of Cost of Abstracts C	6834 12 11		
	1900 0 0		
<i>Less Payments during year</i>	4934 13 11		
do	564 13 11		
	9 15 6		
	1075 0 3		
Other Debtors	9 4 8		
Cash at Bank	1084 4 11		
Petty Cash in hand	592 0 3		
Stock of Paper	9755 3 1		
<i>Abstracts A III.</i>			
Sundry Debtors	£690 0 0		
The Chemical Council	75 0 0		
The Biochemical Society	765 0 0		
Cash at Bank, on Deposit	£1500 0 0		
Do. Current Account	982 13 11		
	2482 13 11		
<i>Abstracts A III Reserve Fund.</i>			
Investments:			
£700 5% Savings Bonds, 1935/65	£700 0 0		
£700 2½% National War Bonds, 1931/53	700 0 0		
£950 2½% National War Bonds, 1932/54	950 0 0		
£1700 1½% Exchequer Bonds, 1930	1700 0 0		
	4050 0 0		
(Market value 31st December, 1945, £4074.)			
Amount due from Abstracts A III Account	900 0 0		
Cash at Bank	145 1 7		
	5095 1 7		
<i>Collective Index Account.</i>			
Cash at Bank	466 16 7		
Cash in hand	1 11 10		
	468 8 5		
	£18,566 7 0		

L. H. LAMPITT, *Chairman.*  
F. P. DUNN, *Treasurer.*

W. B. KEEN & Co.,  
*Chartered Accountants.*

AUDITORS REPORT TO THE MEMBERS.

We have audited the above Balance Sheet made up to 31st December, 1945, and the accompanying Accounts of the Bureau, with the Books and Vouchers submitted to us, and have received all the information and explanations we have required. In our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Bureau's affairs according to the best of our information and the explanations given to us and as shown by the books of the Bureau.

PINSBURY CIRCUS HOUSE,  
LONDON, E.C. 2.  
10th June, 1946.

INCOME AND EXPENDITURE ACCOUNTS (INCLUDING UNINCORPORATED BUREAU) FOR THE YEAR ENDED 31ST DECEMBER, 1945.

ABSTRACTS A I AND A II.

		Expenditure.		Income.	
		1944		1945	
£	s. d.	£	s. d.	£	s. d.
ABSTRACTS A I:					
To Abstracts A I:		2652	1 11	By External Sales...	...
Index:		56	2 8	" Net Revenue from Advertisements	...
" Publishing, etc.		314	16 3	" Transfer to Balance Sheet (the balance of expenditure on	...
Share of Overhead Expenses, C.S., 1944		157	8 1	" publications)	...
Do, S.C.I., 1944		50	13 4		...
Do, 1945		33	15 7		...
		84	8 11		...
ABSTRACTS A II:					
To Abstracts A II:		2166	16 10		...
Index:		427	6 6		...
" Publishing, etc.		157	8 1		...
Share of Overhead Expenses, C.S., 1944		50	13 4		...
Do, S.C.I., 1944		33	15 7		...
Do, 1945		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...
		2166	16 10		...
		427	6 6		...
		157	8 1		...
		50	13 4		...
		33	15 7		...
		84	8 11		...

