

PRESIDENTIAL ADDRESS.

Delivered at the ANNUAL GENERAL MEETING, March 22nd, 1934.

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Unification of the Chemical Profession.

THE last four Presidential Addresses to the Chemical Society have dealt either directly or indirectly with the matter of a closer collaboration of chemical associations and with the possibility of effecting some measure of reunion among our numerous societies. In selecting such topics my predecessors have correctly sensed a feeling which is exercising the minds of many chemists, although opinions are still sharply divided in regard to the practicability of evolving a constructive scheme of unification.

In 1930 Professor Thorpe referred to the need for uniformity of effort and expounded a scheme in which this Society, the Society of Chemical Industry, the Institution of Chemical Engineers and the Institution of the Rubber Industry were asked to collaborate with some seven mining and metallurgical institutions, the idea being to house these bodies in one building of which about two-fifths would be assigned for the purposes of the chemical group, thus realising the long-cherished ideal of a "Chemistry House."

A prominent feature of this scheme was to be the provision of a General Library in which the 33,000 volumes from the Chemical Society's library would represent nearly one-half of the total number of books.

This proposal, which assumed corporate form with the establishment of the Association of Technical and Scientific Institutions (also termed Asti for short), has been in abeyance for some time, although it still represents a "first step to reunion." I need not give details, as these are set out in Professor Thorpe's third presidential address of 1931.

Professor Henderson's first address in 1932 was entitled "The Publication of Chemical Literature," the chief work for which the Chemical Society exists. He referred to the heavy financial burden carried by this Society and the Society of Chemical Industry, the two Societies "which perform the valuable national work of publishing the chemical knowledge on which the progress of chemistry and its application to industry depend." An appeal was made to those chemists who are not members of these two publishing societies to assist in the essential work of publication by making some contribution towards the expense.

In his second address, Professor Henderson reviewed the present position of the Chemical Society and made valuable suggestions in regard to its future policy. He referred to the difficulties confronting our Society and other publishing institutions such as the Society of Chemical Industry, the Biochemical Society and the Faraday Society. He added: "Consequently one is forced to the conclusion that some form of federation of these societies is not only desirable but sooner or later inevitable."

Professor Henderson also mentioned that it had been his intention to refer to the case for amalgamation or federation but was precluded from doing so owing to the circumstance that a Committee of the Federal Council for Chemistry had been appointed to frame a scheme for achieving this object.

Now that a year has elapsed I find myself in much the same position as my predecessor. For, although the above-mentioned Committee, of which I am a member, has had many discussions, it has not yet been deemed advisable to publish a complete report of its deliberations. As, however, the matter is one of great interest to all British chemists, I may perhaps be allowed to give a short historical sketch of the movement without divulging confidential matters or embarrassing my fellow members on this committee.

The matter was recently brought to a head by my Presidential Address of 1932 to the Society of Chemical Industry entitled "Ourselves and Kindred Societies." Under this heading I discussed present-day conditions of chemical associations as illustrated by a survey of the activities of some fourteen chemical institutions, with further remarks concerning co-operation in publication, prospects of reunion and other cognate topics. The subject matter of this address was referred forthwith to ten local sections and three subject

groups of the Society of Chemical Industry. Twelve of these reported in favour of an investigation into the problem of unification, one only being doubtful of the desirability of this step.

It may be of interest to the present meeting to note that the most concrete suggestion came from the Birmingham Section in support of a proposal for the formation of a "British Chemical Society" in which all the present scientific and technical organisations should be subsidiary divisions, thereby submerging their individuality. At first this merger was to exclude the professional and qualifying bodies, although it was hoped to incorporate them ultimately. All the sections which were consulted manifested great interest in the general idea of unification.

Another immediate effect of this address was the formation of a Committee of the Federal Council consisting of seven representative chemists under the chairmanship of Sir William Pope with Mr. Emile Mond as Honorary Secretary. The terms of reference of this Committee were as follows:—"To consider how the resources of the various bodies concerned with the professional and scientific welfare of chemists can be more economically and efficiently utilised." This Committee got to work in November, 1932, and after several meetings drafted a report which was then confidential to the Federal Council. Their report was in turn transmitted to the Councils of the three chartered chemical associations, namely, the Chemical Society, the Institute of Chemistry and the Society of Chemical Industry. After this amount of circulation the report can scarcely now be regarded as any longer confidential and indeed it might with advantage be published in its entirety. I have, however, no intention of anticipating this publication by referring to the document in any detail. Briefly, it calls attention to the inconvenience and disadvantage of a multiplicity of scientific, technical and professional bodies dealing with the affairs of chemists, and in order to remove such disabilities and to provide a basis for the unification and consolidation of the chemical profession it recommends the formation of a new Society of Chemistry having objects comparable with those of the various Royal Societies concerned with other specific sciences. At its inception this new Society should include all Fellows of the Chemical Society, all members of the Society of Chemical Industry and all Fellows and Associates of the Institute of Chemistry. The constitution of the new federation would be so framed as to permit of the entry as constituent bodies of other chemical organisations.

The Councils of the Chemical Society and Society of Chemical Industry approved of the scheme in principle and appointed representatives with authority to publish the draft scheme as finally agreed upon by the enlarged Committee. The Institute of Chemistry replied to the effect that its Council could not, at the moment, express general approval of the scheme and had appointed a special Committee to consider alternative means of ensuring co-operation between the Societies concerned. On May Day, 1933, the Council of the Institute transmitted its considered reply to the original scheme of the Committee. Since, however, this scheme is not yet public, it would be undesirable to refer in detail to the points raised by the Institute's Council. It is sufficient to mention that after a close scrutiny of the details of the scheme the Council of the Institute felt that at this stage the formation of a new society is unnecessary. It regretted that it was unable to approve—even in general principle—of the scheme suggested by the Committee of the Federal Council but was prepared to appoint representatives to confer with the Committee of the Federal Council in order to discuss means of promoting co-operation between the three bodies concerned and of securing further funds for publication and for the central library on the understanding that no scheme should be published without the concurrence of the Council of the Institute.

Subject to the assent of the Federal Council in the foregoing course the Council of the Institute submitted as a basis for discussion an alternative scheme under seven headings, of which the most important is as follows:—That a Council (with a Deed of Trust) be constituted of representatives appointed by the Three Bodies, namely, the Chemical Society, the Society of Chemical Industry and the Institute of Chemistry, in proportions to be agreed upon, together with representatives appointed by "Industry." Any other bodies connected with chemistry would come into the scheme by invitation to be endorsed by the Council of the three original constituent bodies, with appropriate representation.

On receipt of this letter the Federal Council resolved "That the Institute of Chemistry be invited to appoint representatives to confer with the Committee of the Federal Council for Chemistry and three representatives each appointed by the Chemical Society and the Society of Chemical Industry in order to discuss *ab initio* means of promoting co-operation between the three Bodies concerned and to report to the respective Councils." This invitation was accepted, the Committee of exploration was duly constituted and met to prepare a draft scheme for co-operation between the three chartered bodies.

As, however, the Council of the Institute had specified that such a scheme should not be published without its consent, I cannot give full details of Constitution and Objects, for these matters are still under discussion.

But so far as it is permissible to ventilate the subject I should like for the benefit of Fellows of the Chemical Society to indicate the present trend of the discussion. The prevailing idea now is that while each of the three chartered bodies should retain its autonomy they should join in the formation of a Chemical Council constituted under a Deed of Trust to consist of twelve members, three nominated by the Chemical Society, three by the Institute of Chemistry, three by the Society of Chemical Industry and three by "Industry." The principal object of this Council would be the collection and allocation of funds contributed by the constituent bodies and received from outside sources for the support of publications and of a chemical library. The promotion of any other objects of general importance to the constituent bodies would naturally come within the purview of the new Council.

Although it is all to the good that such negotiations and discussions are still proceeding, it must be admitted that the revised scheme is far from opening up any well-defined avenue to unification. This co-operation of the three chartered bodies would if adopted represent only one short step in advance.

It is, however, questionable whether this amount of collaboration would meet the criticism of those leaders of industry who complain of the multiplicity of scientific, technical and professional associations among chemists. These business men who work in mergers and in large combinations fail to see why chemists should need some sixteen separate organisations, especially as certain of these associations have overlapping activities. There are competitive appeals for more financial support and for increase of membership.

The Library.

In any discussion on federation involving the Chemical Society, arrangements affecting the Library become an important consideration.

Our Library contains one of the finest collections of chemical books in the world and is a most valuable asset to British chemists and to British chemical industry. From its inception the Chemical Society had alone borne the capital expenditure in purchasing this collection and the privilege of using the Library was undoubtedly an inducement to chemists to join the Society. In recent years the Library has been made available on equal terms to members of certain other societies which have contributed towards the cost of maintenance as indicated in the following table (showing the last four years).

Contributions from other Societies.

	1930.			1931.			1932.			1933.		
	£	s.	d.									
Association of British Chemical Manufacturers	100	0	0	100	0	0	100	0	0	100	0	0
Biochemical Society (710)	10	10	0	10	10	0	10	10	0	21	0	0
Faraday Society (500)	5	5	0	10	10	0	10	10	0	10	0	0
Institution of Brewing (1390)	45	0	0	50	0	0	50	0	0	50	0	0
Institute of Chemistry (6200)	250	0	0	250	0	0	250	0	0	250	0	0
Society of Chemical Industry (4333)	100	0	0	150	0	0	100	0	0	100	0	0
Society of Dyers and Colorists (1093)	10	10	0	10	10	0	10	10	0	10	10	0
Society of Public Analysts (692)	21	0	0	21	0	0	21	0	0	21	0	0
Total	542	5	0	602	10	0	552	10	0	562	10	0

(Approximate membership in brackets.)

As a result of this arrangement there has been one less inducement for chemists to join the Chemical Society. Moreover, Fellows have left the Chemical Society but have continued to use the Library as members of one of the seven contributory societies.

The numbers of attendances, of books borrowed and of individuals using the Library clearly indicate that some of these contributory societies are obtaining a privilege for their members for which their contributions form a quite inadequate return.

If members of these contributory societies who use the library were compelled to join the Chemical Society in order to retain this privilege, their subscriptions would amount to much more than the sums subscribed to the Library Fund by such societies. The following is a striking example.

During the years 1920 to 1933 124 individuals ceased to be Fellows of the Chemical Society and nevertheless continued to borrow books as members of the contributing Associations. Of this number 25 had been "removed" by reason of being in arrears with two or more annual subscriptions. These numbers do not include those former Fellows who avail themselves of our Library for reference purposes only. If this use of the Library were included in the foregoing return, the numbers involved would be much greater.

There is no doubt whatever that this over-generous gesture towards co-operation has proved very costly to the Mother Society.

I have dealt somewhat fully with the Library, because I regard this collection as our most characteristic asset. It was clearly in the minds of our Founders in 1841, and successive generations of Presidents and Members of Council have fostered its growth and development. We who are now Fellows and reap the benefit of this long-sustained effort have no moral right to do anything which would diminish or depreciate the vested interest of our Society in its storehouse of chemical knowledge.

Collaboration in Publication.

A sub-committee on the business control of publications appointed by the Committee of Exploration reported that the annual expenditure of the three chartered societies on publication exceeds £25,000 (excluding costs on account of administration), of which editorial salaries and assistance (excluding secretarial staffs) amount to about £5,000. It has been suggested that by a central control of business arrangements greater efficiency could be achieved and economy effected in production and distribution and eventually in editorial expenses.

One significant item of the sub-committee's report was a reference to the question of a joint publication containing the official notices of the three Societies together with ephemeral matter of general interest to chemists. The financial arrangements of such a joint publication would require very careful consideration, since the cost of a joint publication and its financial influence on the three societies are difficult to estimate owing to the uncertain effect of the joint chemical newspaper on the overlap membership and on subscribers to "Chemistry and Industry" who are not members of the Society of Chemical Industry.

This plea for caution should be repeated in regard to another project for collaboration in publication which is outside the purview of the sub-committee's report. I refer to the proposal for a joint journal on physical chemistry to be published in co-operation with the Faraday Society. This matter was mentioned in the Report of Council for 1931-32 (J., 1932, 1302) and again in the Council's Report for last year (J., 1933, 454), wherein we find that the following recommendation of the Publications and Finance Committees has been adopted by Council: "that in the best interest of British Chemistry it is desirable to co-operate with the Faraday Society in publishing a joint journal devoted to physical chemistry."

The Council's report adds that the scheme of co-operation drawn up by the Joint Committee of the two Societies has also been adopted but should not be put into operation in 1933 in view of the estimated cost of producing the joint Journal and of the present financial position of the Society. The Treasurer's report presented this afternoon shows that our financial position is worse than it was a year ago. Before this scheme is carried

any further I suggest that a serious reconsideration of the matter is highly desirable, for we are again at the parting of the ways as when the Library concessions were made fourteen years ago—with this difference, however, that we may retrace our steps in the earlier case by withdrawing these concessions, but when we are once committed to a joint journal we shall have taken a course which is practically irrevocable.

Last year the Treasurer "expressed the hope that Fellows would do their utmost to induce chemists to join the Society and support the Council in its efforts to increase the membership." He also referred to the 1926 level when there were 4093 Fellows, adding that if this position could be regained "the Society would be established in a strong financial position and the Council relieved of anxiety."

Let us examine the projected scheme of joint publication in the light of the Treasurer's exhortation. Is it going to increase our membership and, if so, in what way?

Of 500 members of the Faraday Society, 160 are already Fellows, so that even a complete recruitment of the remaining 340 members would barely achieve the Treasurer's aim. But quite a considerable proportion of these outside members are primarily physicists to whom this inducement would scarcely appeal. Moreover financial considerations would militate against the recruitment for our Society of even the chemical members of the Faraday Society. The annual subscription of the latter society is £2, against ours of £3. The loyalty to the Mother Society of the 160 members who are already Fellows may continue to be proof against this very appreciable difference, but we are bound to take into account those who have not yet joined. If any one of these physical chemists could get the journal he mainly requires for £2 or even at a slightly increased annual rate, is it likely that he would join the Chemical Society at the higher subscription, especially as at present he could use our Library and thus refer to all our other publications? It is scarcely conceivable that many more chemists would become members of both Societies. On the whole we stand to lose members rather than to gain them.

It is urged in favour of the scheme that it would halve to each Society the cost of publication of physico-chemical papers. As there would in all probability be more of them to publish, this anticipation is scarcely well founded. It is certainly doubtful whether any economy due to joint partnership would compensate for loss of members.

With the publication of physico-chemical papers under divided control, the remainder of the Journal, our sole distinctive publication of original communications, would become a journal of organic chemistry with an occasional inorganic paper. Last year nearly 38% of the papers published in the Journal were classified under general, physical and inorganic chemistry. Presumably under the adopted scheme the greater part of these would appear in the joint Journal. ~~Now hitherto from its commencement it has been the duty and prerogative of the Chemical Society to publish independently all physico-chemical papers submitted to it.~~ Our first President, Thomas Graham, may be regarded as the founder of physical chemistry in Great Britain and many of his successors have been distinguished physical chemists. In view of our early development, ought we to cease even in part to fulfil this essential function of publishing physico-chemical papers? If a separate journal be really needed for physical chemistry, it should surely be the business of our Society to supply this service and so maintain its old standard and prestige.

Our Provincial Meetings.

Since its foundation 93 years ago the Chemical Society has been a centralised republic of classical type, but with the growth of chemical activities in provincial centres it has been felt increasingly at the London Headquarters that some effort should be made to bring the Society more prominently before the notice of chemists living outside the metropolis. Our annual general meetings are no longer confined to London and the present popular Birmingham meeting is the fourth of the provincial series. This alternation between London and the provinces is likely to remain a permanent feature in our annual programmes.

In 1932 a further step was taken when local representatives of the Chemical Society were selected for the chief provincial centres for the purpose of promoting the social and scientific activities of the Society outside London. One of our three Honorary Secretaries

has taken special charge of this new movement and in collaboration with the new local representatives, who have all displayed great zeal and enthusiasm, a programme of about 20 local meetings has been arranged. These meetings are certainly comparable in general importance and in scientific interest with those held at Burlington House.

The Council has very wisely refrained from instituting local sections. Had this course been adopted, these provincial groups of the Chemical Society would have found themselves in competition with the local sections of several other chemical organisations. By refraining from this directly competitive action and by taking a more detached view of the local politics of contending sections our representatives may eventually be able very materially to assist in the elimination of overlap and unnecessary competition. There is already much evidence that in certain local centres the members of various chemical bodies are showing a willingness to collaborate in the annual arrangement of scientific meetings. It may well be that the reunion which some of us desire may be brought about in this manner by federations among chemists located in provincial centres.

A Possible Ideal.

A few years ago Professor Travers commented in the chemical press on the fact that the notice boards of the Chemical Department in his University displayed three appeals each exhorting students and graduates to join a particular chemical institution. In this case these invitations were in favour of the three chartered bodies, but it seems highly probable that in the near future the number of such appeals will increase, for we are still in the competitive age of chemical associations. Each organisation has enthusiastic supporters who are convinced that their special society would render more services to chemists and to chemistry if only they could secure more members and obtain more financial support. But the field for missionary enterprise is not unlimited and the purses of chemists are not inexhaustible.

The discussions of the last two years have brought out a few interesting facts in regard to the number and affiliations of British Chemists. The total membership of the three chartered bodies is approximately 14,000, but owing to overlap of membership (about 3,000) this number really represents 11,000 individuals. It has been estimated that there are from 5,000 to 10,000 chemists outside the three main bodies, although probably a substantial number of these are members of other chemical associations.

The total membership of some twelve chemical associations, other than the three chartered bodies, amounts to approximately 10,800, but as there is undoubtedly considerable overlap, in some cases amounting to more than 50%, this total probably represents only about 5,000 individuals or even somewhat less.

For instance, the British Association of Chemists now has a membership of 1,600, of whom about 54% are also members of the Institute of Chemistry.

If in addition to the 11,000 members of the three chartered bodies we could attract into a more comprehensive organisation 4,000 of the chemists at present outside the chartered societies, we should secure 15,000 adherents and the question which next arises is what would be an adequate fee to pay an institution which could give to each member recognition of professional status, library facilities, opportunities for scientific meetings and the chemical literature he mainly needs. If this fee were assessed at £5 per annum, it would be less than the total subscription paid nowadays by a chemist belonging to more than two of our separate organisations.

This annual fee paid by 15,000 members would ultimately produce a revenue of £75,000, which compares favourably with the £46,700 collected in 1931 as the combined subscriptions of some 15 chemical associations which in that year ended with a deficit of approximately £1000 in spite of additional revenues amounting to £31,300 derived from investments, sales of publications, advertisements, rents and occasional donations, giving a total joint income of £78,000.

To be on the safe side in our new organisation we should require an annual income of at least £85,000. Assuming that the dividends and fees of the present societies were still available, these amounted in 1931 to approximately £7,400. To reach the total of

£85,000 the revenues from advertisements and sales of publications would need to be about £3,000. But in 1931 these advertisements and sales of publications furnished the 15 societies with a revenue of £23,800. It is scarcely to be contemplated that this rationalisation of our publishing activities would lead to a loss represented by £20,000. Accordingly I feel justified in assuming that we should be financially better off as a result of this concerted effort at unification, even after taking into account the fact that certain of our Fellows and Members have paid life compositions to one or more of the chartered bodies so that these members cannot be included among those who would pay the full annual subscription.

The plan thus outlined may be regarded as impracticable because at present there is no central office of sufficient size from which the scheme could be operated and administered. The permanent officials of the three chartered bodies discussed office accommodation in their report to the Federal Council and suggested £35,000 for additional offices apart from cost or rent of site. If suitable accommodation were rented, the annual cost would be upwards of £3,000. Either of these solutions would involve extra expenditure on the part of the new Society. But in this discussion I have not allowed for any help from "Industry," which might, however, be forthcoming to a larger extent than at present if only chemists would set their house in order by some substantial measure of federation.

The data I have selected may be tinged with the optimism which not infrequently accompanies the solicitations of a company promoter, but as my aim is really a brotherhood rather than a commercial undertaking I believe that the main difficulties are psychological rather than financial. Brothers are apt to disagree and fraternity is a lofty ideal difficult to reach and harder still to maintain. There are many prominent members of our profession who are still convinced that our present highly sectionalised condition is the best arrangement we are likely to obtain among British chemists, and they regard the increase in specialist societies as an inevitable consequence of the development of chemical science in its application to industry. This separatist movement has recently been countered by the Society of Chemical Industry, which has extended its group system so that it now has four subject groups, to this extent obviating the formation of four new associations. But much more remains to be done before federation becomes a living force among us. Fifty-two years have elapsed since the Newcastle Chemical Society merged into the larger organisation and became the Newcastle Section of the Society of Chemical Industry. In 1932 the Food Group of the same Society absorbed into its membership a newly formed Society of Food Industry. These two altruistic acts of unification among British chemists might be repeated with benefit to the whole profession.

Recently, British physicists have set us a good example in the merging together of the Physical Society of London and the Optical Society. I might also mention the reunion which has recently taken place among the various branches of the Methodist Church. In both temporal and spiritual matters, unity is strength.

Professor Henderson did not overstress the point when he said of the various publishing societies that federation is sooner or later inevitable. Why need we wait until driven to this course by financial stringency? There are certain incidents, not to be mentioned even in a presidential address, which tend to show that it does not pay us individually to be members of a disunited profession.

Bureau of Chemical Abstracts.

I have not referred specially to this Bureau, instituted by our Society and the Society of Chemical Industry, because the machinery which Professor Philip devised and tended for nine years still continues to run smoothly more in spite of than because of my chairmanship. The Bureau is, however, still hampered for want of funds. Our aim to produce a Richter formula index is still unattainable on account of its costliness and it is even doubtful whether we can afford to prepare and maintain at Headquarters a card index of new compounds to which research workers might refer on application. Our biochemical abstracts have increased so considerably that it has been found necessary to give additional assistance to the Sub-Editor for that section. The comprehensive system of abbreviations

continues to be used in our abstracts for reasons of economy, although it is still hoped that whenever our finances are improved it may be found possible to dispense with most of these shortened forms. The burden of this publication still presses heavily on both participating Societies. Occasionally I receive suggestions to the effect that it might be desirable to discontinue British Abstracts and leave our Fellows and Members to depend on one or other of the two foreign sets of abstracts which are comparable in scope with our own. The loss of prestige to British chemistry occasioned by this discontinuance would be out of all proportion to the saving effected. It would be another inducement the less to join the two publishing Societies and the effect would soon be apparent in further loss of membership. I am not alone in the belief that British Abstracts are the best in the world and all will admit that they maintain a very high standard. British chemists should continue to use them rather than send their subscriptions abroad for a foreign set. The money is well spent in our own country, since that portion of the cost of our Abstracts represented by Editorial fees and Abstractors' honoraria actually returns to members of our profession who are subscribers to one or both of the publishing societies.

The Journal.

Our Journal is an inescapable item of our expenditure, since the publication of original communications is a primary function of the Society. The average cost during the last few years has been of the order of £5,500. It would certainly exceed this amount but for the close scrutiny maintained by the Publication Committee. Every reasonable scope is, however, given to authors and actually the number of papers declined is less than 3%, out of a total of about 400 per annum. These papers represent the main output of original work in pure chemistry carried out by British chemists.

It follows that all the active research schools of chemistry in the country are indebted to the Chemical Society for furnishing a widely circulated medium of publication. Some ten years ago our former Treasurer, Professor Thorpe, issued an S.O.S. in regard to the increasing cost of this publication. Many individuals responded and a special publications fund was instituted. But the University of Birmingham was the only academic institution which honoured the Treasurer's appeal with a substantial donation. This timely and generous gesture is worthy of recurrent imitation by all British Universities. Any research school or institution which benefits by the Society's assistance in publication might well be invited to show its appreciation of this service by a contribution towards the expenses of the Journal.

A Seven Years' Plan.

I have referred to the difficulties which to-day confront the Chemical Society, an institution which merits the support of all members of the profession, because as the oldest chemical society in the world it has played the chief part in spreading chemical knowledge among British chemists and in securing general recognition for the chemical profession throughout the British Empire. Much that the Society has done in these respects is undervalued by the rising generation in spite of the fact that, with truly maternal instinct, the Mother Society has placed her resources and amenities freely at the disposal of the daughter societies. These younger institutions ought now to manifest some measure of filial gratitude for the privileges so generously extended by the parent body. As matters stand at present, unilateral concessions by the Chemical Society do not promote reunion but rather impede it, since they confer uncovenanted benefits on many sectional organisations and even on individuals outside our numerous associations.

The protracted discussions still in progress are indicative of the great difficulty experienced in reversing a separatist movement which has been in operation for more than sixty years. This development arose in spite of the wide objective which our Founders plainly had in view. Their aims are clearly expressed in the original charter of the Society granted in 1848. Therein it was stated that the Society was established "for the general advancement of Chemical Science, as intimately connected with the prosperity of the manufactures in the United Kingdom, many of which mainly depend on the application of chemical principles and discoveries for their beneficial development, and for a more ex-

tended and economical application of the industrial resources and sanitary condition of the community." It is significant that the term "application" occurs twice in this opening passage of our original Charter. The scope of this application is sufficiently wide to cover the whole range of industrial chemistry. Had this policy been more actively pursued in the early days, certain specialist societies might have developed as subject groups of the parent body similar to those which have since been formed within the Society of Chemical Industry.

The larger organisation which I have in mind would undertake the publication of all original contributions from British chemists and also of British chemical abstracts. It would distribute these communications in conveniently sectionalised forms according to the requirements of its various groups of members. Provided always that the great majority of British chemists joined this more comprehensive society, it would become possible for its publications committee to devise a scheme whereby a member could select a certain set of publications suited to his needs. The bond of union would be the weekly chemical newspaper which among other items of information would contain summaries of the proceedings of all the various groups of the main federation. A Society of Chemistry having 15,000 members would be capable financially of undertaking this task of publication over the whole range of chemical subjects, especially with the aid of a substantial contribution from "Industry" which would probably be forthcoming if this consolidation of chemical interests were an accomplished fact.

It would be impossible for long to keep the scientific and professional aspects of chemical organisation in separate water-tight compartments. Already the lines of demarcation are becoming obliterated. Our largest professional body, the Institute of Chemistry, is publishing an ever-increasing amount of scientific matter in its Proceedings and in reprints of lectures and discourses on the most varied chemical topics. The Institution of Chemical Engineers, another qualifying body, issues an annual publication of scientific and technical communications.

The extent to which one all-embracing society could legislate for both the scientific and the professional needs of chemists is a knotty problem in any comprehensive scheme of reunion. It is evident, however, that our Founders originally meant the Chemical Society to be a qualifying body as well as a scientific association, for they recognised two grades of members, who in accordance with the Royal Charter were designated Fellows and Associates. A great opportunity for the unification of the profession was lost when the grade of Associate was allowed to lapse. In the few years during which this grade was in active being it secured at least one adherent of undying fame, namely, August Kekulé.

Within the wide ambit of the Charter of Incorporation of the Chemical Society one finds both the main objective of our numerous technological societies and a definite forecast of the Institute of Chemistry and other professional bodies.

Unfortunately, later developments along these foreseen lines materialised outside the Mother Society rather than under its auspices, so that the chemical profession became progressively disunited. I suggest that unification would be best effected by a return of the many chemical wanderers to the one parental fold. For more than forty years we have erred and strayed in a wilderness of conflicting interests. Might we not from now onwards strive to reach a more congenial Canaan of confederation so that when in 1941 the Chemical Society celebrates its centenary it may once again be fully representative of British chemists and of British chemistry?