

A Short History of The Institution of Engineering Inspection

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PART 1. Up to 1919.

INSPECTION AS A PROFESSION IN ITS OWN RIGHT.

1.1. Its Origin

The story of The Institution of Engineering Inspection is, as we should expect, closely associated with the development of inspection as a profession in its own right. The traditional craftsman of past centuries needed no inspection. He made his work to his own quality standards, to satisfy both himself and his customer. Everything was made to "fit", and nobody thought of specifying tolerances.

The craftsman usually worked either in his own house, or in that of his master. During the 18th and 19th centuries, however, the invention of machinery and factors such as the need to be near water power led to buildings being set aside, solely for manufacture, and so the factory system came into being.

Until the late 1890's, a manufacturer or contractor usually made complete units, or at least complete sub-assemblies. These either worked and so were accepted, or did not work and so were rejected by the customer. But gradually two factors contributed to a change.

1. Advances in engineering demanded production to greater and greater dimensional accuracy.
2. The increasing tendency to manufacture components separately, and then assemble later in another department or even in another factory, led to inspectors being appointed to check each stage of production. But without tolerances, nobody was certain what was acceptable and arguments were inevitable. Hence in the early years of the 20th century tolerances gradually came into use.

1.2. The Impact of the First World War

The rate at which the professional inspector established himself was greatly accelerated by the World War from 1914 to 1918. In peacetime the Woolwich Royal Arsenal's Inspection Department had consisted of only a few technical officers, attached to the regular Army, plus a small chemical department, but during the war it was rapidly augmented by civilian personnel. Some of these were "fit, energetic and knowledgeable", but others although willing, were, in the words of a report at that time, "long past their physical prime".

The Government established a Ministry of Munitions, in order to co-ordinate the production of armaments. Mr. G. C. Sanderson, who is now 86, and an Honorary Member, joined our Institution only 3 weeks after it was founded in 1919, and he described some of the difficulties to me. During the war he was an inspector for the Ministry of Munitions, and he said that gauges and other inspection equipment were in such short supply, that it was often impossible to check components. On several occasions he remembers that when shells were assembled, the fuses were found to be too large to go in, and so were left out! Presumably, some German thought it was his lucky day, when a shell fell near him, and then failed to explode.

Further difficulties arose because methods of inspection were not standardised, and varied from place to place. In an attempt to correct this, a conference of all inspectors was called in Sheffield and Mr. Sanderson says this achieved considerable improvement.

PART 2. 1919 to 1922.

THE TECHNICAL INSPECTION ASSOCIATION.

2.1. Its Formation

Altogether some 1,500 men, and a few women, were thus united as inspectors. When the war drew to an end, they realised they would shortly be dispersed back to civilian jobs and, in an effort not to lose touch with each other, some of the staff of the Director of Inspection for Munition Areas (D.I.M.A.), at the instigation of Mr. Ridley Makepeace, proposed the formation of an Old Boys' Association. They held a meeting in Manchester on 28th October, 1918, and preliminary preparations for the Association were already in hand when, on 11th November, the Armistice was signed and the Controllor, who was aware of these preparations, suggested that it would be a pity to confine them to the D.I.M.A. division alone. His suggestions were therefore discussed at a Conference of the whole department, held in London on 13th January, 1919. At this a provisional committee of 16 members was set up, and it in turn formed The Technical Inspection Association, which in 1922 was to become the I.E.I.

The objects of The Technical Inspection Association (T.I.A.) reflect the circumstances under which it was formed. They were briefly as follows:

1. To maintain good fellowship between members.
2. To help members to keep in touch with each other and to assist each other in obtaining appointments.
3. To develop the progress and standardisation of inspection in engineering, chemical and allied industries.
4. To conserve and use experience gained during the war.
5. To prepare and keep a register of members, showing their careers and qualifications.

There were 4 grades of membership.

1. **Original Members.** Those who had served as officers in the Inspection Department of the Ministry of Munitions.
2. **Members.** Officers of a similar status in other departments.
3. **Associates.** Persons qualified to be original members, who only wished to retain a nominal connection.
4. **Honorary Members.** Persons of distinguished attainments, who were in a position to further the objects of the Association.

The annual subscription for Original Members and Members was one guinea, but Associates only paid five shillings.

The T.I.A. was controlled by a Council consisting of a President, two Vice-Presidents and 15 corporate members, including a Secretary and a Treasurer, all of whom were unpaid.

2.2. The First Meeting of the T.I.A. on 1st April, 1919

On 1st April, 1919, the provisional committee called the first general meeting, and this was held at the Royal Society of Arts, 18, John Street, London, W.C. First they obtained approval for the constitution summarised above. Next they announced the result of the ballot for Council members, which had already been arranged by sending each member a complete list of all members' names, and asking them to vote for 18 of them. As we should expect, the first Council had almost exactly the same members as the provisional committee.

THE INSTITUTION OF ENGINEERING INSPECTION

Presidents

1919-21	*A. H. Collinson, C.B.E., M.I.C.E.	} Chairmen of the Technical Inspection Association
1921-22	*A. E. Hadley, C.B.E., M.I.E.E.	
1922-23	*N. P. P. Sandberg, C.B.E., M.Inst.C.E.	
1923-24	*Colonel F. L. Galloway, C.M.G.	
1924-25	*Francis R. Wade, O.B.E., M.I.M.E., M.C.I., M.I.A.E.	
1925-26	*Lt.-Col. P. R. Embury, C.M.G.	
1926-27	*R. P. C. Wilson, C.B.E., M.Inst.C.E., M.I.E.E.	
1927-28	*H. V. Davey, M.B.E., M.C.I.	
1928-29	*A. H. Foyster, M.B.E., M.I.E.E.	
1929-31	*Hal Gutteridge, M.I.Mech.E.	
1931-33	*Lt.-Col. Sir John H. M. Greenly, K.C.M.G., C.B.E., M.A., M.I.Mech.E.	
1933-34	*T. W. Ellis	
1934-35	*C. Strachey Hawdon, A.M.I.C.E., M.I.Mech.E., F.R.S.A.	
1935-36	*Major H. Myers, A.M.I.C.E., F.R.Ae.S.	
1936-37	Damer Dawson	
1937-38	S. E. Goymour	
1938-39	*Lt.-Col. H. W. S. Outram, C.B.E., T.D., A.R.S.M., F.R.Ae.S., A.M.I.E.E.	
1939-41	*H. V. Senior, M.I.Mar.E., M.Inst.Fuel.	
1941-43	G. O. Watson, M.I.E.E., M.I.Mar.E., Mem.A.I.E.E.	
1943-44	*Maj.-Gen. A. W. Sproull, C.B., C.B.E., B.Sc., M.I.Mech.E., M.I.E.E.	
1944-45	*Dr. Harold Wheeler, F.R.Hist.S.	
1945-46	*Maj.-Gen. E. A. Woods, C.B., C.B.E., M.C., R.A.	
1946-47	*Dr. Edwin Gregory, M.Sc., Ph.D., F.R.I.C., F.I.M.	
1947-48	*Air-Com. J. Sowrey, A.F.C., F.R.Ae.S.	
1948-49	Lt.-Com. R. B. Fairthorne, R.N.(Ret.), M.I.E.E., A.M.I.Mech.E.	
1949-52	A. Vernon Watson, A.M.I.P.E., A.I.Mech.E., F.R.S.H.	
1952-53	Brig. H. R. Howard, C.B.E., M.I.Mech.E.	
1953-55	*Maj.-Gen. John Scott Crawford, C.B., C.B.E., M.I.Mech.E., M.I.Mar.S.	
1955-57	*Maj.-Gen. Wilfrid Shakespear Tope, C.B., C.B.E., M.I.Mech.E., M.I.E.E.	
1957-61	Lt.-Gen. Sir Frederick Wrisberg, K.C.B., C.B.	
1961-63	Sir Thomas Barnard, C.B., O.B.E., A.M.I.C.E.	
1963-64	F. E. McGinety, C.B.E., M.I.E.E.	
1964-66	Maj.-Gen. B. G. Ralfs, C.B., R.M.	
1966-69	I. R. Smith, C.Eng., M.I.Prod.E.	

* Deceased.

The chief officers were:

President	Mr. A. H. Collinson, C.B.E., M.I.C.E.
Vice-Presidents	Mr. A. E. Hadley, C.B.E. Lt.-Gen. Sir Percy Lake, K.C.B., K.C.M.G.
Joint Hon. Secretaries	Mr. W. Haynes Smith Lt.-Col. J. H. M. Greenly
Hon. Treasurer	Mr. N. P. P. Sandberg

It was announced that the T.I.A. had already received £446 in subscriptions, of which £380 remained after initial expenses had been paid.

2.3. The Inaugural Meeting on 9th May, 1919

The Council decided to hold an "Inaugural Meeting" in Central Hall, Westminster on 9th May, 1919. It therefore appointed an entertainments sub-committee, with authority to spend up to £130, although the actual cost turned out to be only £94.12s.0d.

Invitations were sent to:—

1. The editors of most of the daily newspapers.
2. The principal Technical Institutions.
3. The 14 distinguished people, including the Rt. Hon. David Lloyd George, who had already been invited to become Honorary Members.

By the time it was held, this meeting was called a *conversazione*. It was essentially a social gathering but we have no details of what entertainment was provided; nor do we know how many of the distinguished people accepted their invitations. However, the Council was pleased with the result, although it did resolve that those attending future *conversazioni* should be asked to pay for their admission, since it was felt to be unfair to use the very limited T.I.A. funds for an event which some members could not attend. This decision, as we shall see, had some interesting consequences.

2.4. Headquarters and the Secretary

At the start, the T.I.A. had no headquarters of its own. Its first official address was at the Hotel Metropole, Northumberland Avenue, but this was really the headquarters of the Ministry of Munitions. However, both of the original joint secretaries resigned, one after the other and when in July, 1919, Mr. C. J. Wharton took over as Hon. Secretary, Headquarters moved to his personal office at 44, Bedford Row, W.C.1.

By now a lady typist had been engaged at £2 per week for three months, to type the list of members and in addition, the Council contributed £3 per week towards the cost of clerical assistance employed by Mr. Wharton on the T.I.A.'s behalf.

The use of Mr. Wharton's office was intended to be a temporary expedient and the Council kept a look-out for an office of its own, although it was afraid this might strain the slender financial resources. Fortunately, Mr. Wharton did not press the matter and, as it turned out, the T.I.A. and its successor, the I.E.I., used Mr. Wharton's office as its headquarters until 1933. In November, 1921, Mr. Wharton, and hence the T.I.A., moved to Palace Chambers, Westminster.

2.5. Development of the T.I.A.

On the 20th May, 1919, the Council decided to set up a series of sub-committees. The first to be appointed was the General Purposes Committee, which was to assist the secretary in all questions of management and to advise on the formation of other committees.

During the summer a Papers Committee was formed to arrange technical lectures for the coming winter. Next the

The Royal Society of Arts.



Council decided to issue a quarterly Gazette to all members and the first edition appeared in December, 1919.

An interesting, although minor incident, occurred during the first few weeks of the T.I.A.'s existence. A locked drawer was broken into and some £4 of the T.I.A.'s funds stolen. Two Council members offered to make good the loss, but the Council decided the fairest thing was to write it off against T.I.A. funds:

The T.I.A. had started off with a terrific burst of enthusiasm with 500 members during the summer of 1919, but then it seems to have lost some of its steam. At the start Council meetings were held weekly, but there was no Council meeting at all between October, 1919, and May, 1920, and gradually finances became sufficiently low for the Council to accept eagerly any donations to its funds. By the first Annual General Meeting (A.G.M.) on 30th March, 1920, the cash in hand was only £23. Not surprisingly, members attending this A.G.M. were given a "pep talk" on playing a more active part and urged to pay their subscriptions.

On 8th March, 1921, the General Purposes Committee was dissolved, and the following committees created to replace it.

1. A Technical Committee, charged with making the T.I.A. the "recognised authority on inspection throughout the country".
2. A Social Committee to arrange social gatherings in order to hold members together.

At the second A.G.M. on 18th March, 1921, the Council admitted a year of "marking time". It was, of course, a period of commercial depression, following the war. There were still nominally 485 members, but only 365 had paid their subscriptions. Various papers on inspection and allied subjects had been given at meetings, but these had been only moderately well attended.

In June, 1921, the treasurer resigned and Mr. Wharton took over as hon. treasurer as well as secretary. His daughter, who had given the T.I.A. a lot of secretarial help was forced by ill health to give up, and the Council therefore increased the clerical allowance to Mr. Wharton from £3 to £4 per week.

In December of the same year, the Social Committee arranged a dinner at the Florence Restaurant. Some 51 members paid 10s. each to attend and this resulted in a favourable balance of £1.16s.8d. The Council were pleased with this result and resolved that the dinner should become an annual event.

Membership continued to fall and, at the 3rd A.G.M. on 31st March, 1922, there were only 269 paid-up members, compared with 365 the year before, and the Chairman therefore proposed a new constitution, which would attract "peacetime inspectors".

PART 3. 1922 to 1925.

THE FORMATION AND EARLY YEARS OF THE INSTITUTION OF ENGINEERING INSPECTION.

3.1. Its Formation

The proposal was that the T.I.A. should become the Institution of Engineering Inspection, that it should be open to industrial inspectors, as well as to those employed by the Government, and that it should have a charter of incorporation. This means that it was effectively to have the structure of a limited company, except that:—

1. It was to be a non-profit making association.
2. Its financial liability would be limited to guarantees made by members, as provided for in the Companies (Consolidated) Act of 1908. This was not to exceed £1 per member.

The proposals were accepted at a Special General Meeting on 8th September, 1922, and finally confirmed at another meeting on 22nd September. The actual date of incorporation was 10th November, 1922, and so on that date, the I.E.I. as such came into existence.

Some of its objects were:

1. To promote and encourage the practice of inspection in engineering and allied industries.
2. To ensure that inspection was only undertaken by qualified persons.
3. To raise and uphold the status of practising inspectors.
4. To enable members to meet, exchange ideas, and take corporate action in their common engineering inspection interests. (Note, however, that the I.E.I. may not act as a Trade Union.)

There were to be four grades of membership:

1. **Honorary Members** elected at a general meeting, because they had either rendered service to the Institution or were in a position to further its objects.
2. **Members** who were to be persons qualified by training and experience to take full responsibility for engineering inspection.
3. **Associate Members.** Those who were trained in inspection, but lacked experience.
4. **Associates.** Those in positions of technical or commercial responsibility, connected with engineering.

Subscriptions were:

Members and Associates	£2 2s. 0d.
Associate Members	£1 1s. 0d.

Members were to be entitled to put M.I.E.I. after their name and Associate Members A.M.I.E.I. Various rules about professional conduct were introduced and, as we shall see, the Council have at times had to caution members about breaking them.

Companies were invited to become affiliated members of the I.E.I.

3.2. Initial Progress

Immediately after incorporation, the Council set about the job of obtaining a corporate seal, and designing a crest. The seal, of course, is used in the preparation of the diploma, now called the certificate of membership, which is sent to every member on joining. Since finances were somewhat shaky, Council members agreed to contribute to a "Foundation Fund" to help meet the costs incurred in changing from the T.I.A. to the I.E.I.

Early in 1923, the Council set up five committees:

1. A Financial Committee, to advise generally on finance.
2. A Selection Committee to vet applications for membership, and advise Council which should be accepted.
3. A Membership Committee to consider ways of increasing the number of members.
4. A Reception Committee to arrange meetings, visits, social events, etc.
5. A Proceedings Committee to arrange publication of technical papers, especially those presented at meetings.

In April of the following year (1924) Council decided to introduce a new grade of membership, entitled Viewer Associate, which was to cater for people like foreman examiners. At the same meeting they made arrangements for bound copies of the proceedings to be available; the cost of binding in cloth was 3s., including gilt lettering.

By now, Mr. Wharton's allowance for clerical assistance had been increased to £8 per week. Indeed, there is no doubt that Mr. Wharton was one of the mainstays of the I.E.I. in its early days and the Council passed numerous votes of thanks to him. In the spring of 1924, he resigned as a Council member, in order to make room for another

member, since as secretary and treasurer, he attended Council meetings anyway.

That autumn, the Council ordered 350 diaries for 1925 from Lett's. These were specially printed with the name of the Institution, and included other information of interest to members, to whom they were issued free.

Various meetings and visits were planned but things were not easy, and several had to be cancelled for various reasons.

3.3. Finances

Early in 1923, Council became concerned because 1922 had shown an excess of expenditure over income and as a result:—

1. The Membership Committee promised renewed efforts to increase the number of members, and affiliates.
2. Some 30 ordinary members guaranteed £2, and Council members guaranteed £25 each, to cover any loss which might be incurred.
3. On the brighter side, the Reception Committee were congratulated on making a "profit" of 8s. 10d. on a dance! Later, however, their luck changed. The annual Reception held on 25th November, 1924, in the Hyde Park Hotel, even though considered successful, made a loss of £25. The President offered to pay this out of his own pocket but Council would not allow him to do so, yet in view of their decision in 1919 (see the end of Section 2.3), they could not charge it to Institution funds. They therefore decided to share the loss, and each Council member contributed 1½ guineas.

In March, 1925, the annual dinner was held at the Hotel Cecil. Tickets were about 15s. each and budgeting must have been very good because expenses almost exactly equalled receipts. There was, in fact, an overall loss of 3s. 2d., and, at the next Council Meeting, this was "passed round the table until the necessary sum was found". Presumably, Council members contributed the loose change from their pockets!

PART 4. 1925 to 1929.

THE BEGINNING OF FINANCIAL DIFFICULTIES.

4.1. Finances

In April, 1925, the hon. treasurer expressed concern at the way the cost of running the Institution was rising, and pointed out that there was now very little in reserve. By September the position had further deteriorated and he forecast a loss on the year of around £125, even if some £130 still outstanding in subscriptions could be collected. Council resolved:

1. To try to collect the outstanding subscriptions;
2. To have a drive for more members;
3. Not to purchase I.E.I. Diaries for 1926 (indeed there has never been a diary since that one in 1925).

Nevertheless, it went ahead with preparations for the annual Reception which was to be held at the Hyde Park Hotel on 27th November, and for which tickets were 12s. 6d. "with no reduction for quantity". Unfortunately, Queen Alexandra died shortly before the Reception was due and it therefore had to be postponed until the end of Court mourning. The postponement resulted in an irrecoverable loss of £16 8s. 0d.

As the financial situation became progressively more serious, Mr. C. J. Wharton, the combined secretary and treasurer, came to the rescue and lent the I.E.I. £100. By February, 1926, however, finances were reported to be "not unfavourable in the circumstances" and the £100 was returned to Mr. Wharton with thanks and plus 6% interest, the maximum permitted by the constitution. This apparent change in fortune needs some explanation. The expenses of

an Institution such as the I.E.I. tend to be spread roughly evenly over the whole year and, to be slightly higher in the winter months when meetings are mostly held. Income on the other hand comes almost entirely from subscriptions and therefore is received predominantly in January, February and March. Hence in February 1926, with subscriptions for the new year coming in, the position looked much rosier than it had in the previous autumn, even though the improvement was largely illusory. From the above it follows that too much reliance should not be put on money figures which are quoted in this history. Not only has the value of money changed but, in addition, one needs to know the time of year and what the figure concerned does or does not include, before a strict comparison can be drawn.

The Reception was eventually held in February, 1926, and the Council judged it successful, even though it lost some £12. The Council then decided that this deficit should be made good by those Council members who had bought less than 6 tickets!

By June, 1926, concern was again expressed about the financial situation, and this concern continued throughout the year. The drive for more members was intensified and an Affiliates Committee was set up to try to persuade more firms to become affiliated.

In spite of difficulties, Council went ahead with preparations for the annual Reception that autumn at the Hyde Park Hotel. This perhaps is not surprising because the Reception was undoubtedly the highlight of the Institution's year. This time they were financially more fortunate because they had a favourable balance of £15 12s. 0d. This was said to be partly due to economy in running the Reception and partly because it was a very foggy night and many ticket holders did not turn up!

In December, 1926, a vacancy occurred on the Council and Mr. C. J. Wharton filled it thus becoming an ordinary Council member again. The year ended with only a slight excess of expenditure over income but this was not only illusory, it was also short-lived. Mr. Wharton had again come to the rescue, this time by foregoing a payment of £130 which was due to him for office accommodation and clerical assistance. However, the auditors would not accept this, and insisted on the accounts showing a deficit of £150 18s. 5d. over the year. Mr. Wharton "retaliated" by proposing to Council that his rent, etc., for the next year (1927) should be £288 instead of £416. This was accepted with many thanks and hence Mr. Wharton achieved the donation he had intended.

In February, 1927, a Propaganda Committee was set up. Its object was to try to persuade practising inspection engineers to join the Institution. In April the Propaganda and the Affiliates Committees amalgamated, and the Finance Committee was discontinued. The reason for the latter decision is not known, but we may guess that finances were so serious, that it was decided that they should be dealt with by the full Council.

The Reception that year showed a favourable balance of 18s. 6d., and, with Mr. Wharton's generous gesture, 1927 finished with an overall surplus over expenditure of £126 18s. 10d.

From the earliest days, the Institution had had some members in Essen in Germany, presumably associated with the Army of Occupation and, in February, 1928, they asked if their subscription could be reduced because they could not attend meetings, etc. Needless to say, the Council was unable to grant their request.

In 1928, Mr. Wharton again fixed his rent, etc., at £288, the dinner (which was held most years in March) showed a cash balance of £1 12s. 3d., and the Reception in the autumn a balance of £5 2s. 10d. Nevertheless, the year finished with a net loss of £2 3s. 5d., and, in 1929, Mr. Wharton once again accepted a rent, etc., of £288., and, at

the A.G.M. that year, when a vote of thanks was proposed to him, it was stated that he had combined "the wisdom of age with the enthusiasm of youth".

4.2. Membership Problems

Soon after the 1914/1918 War, a commercial depression set in, which lasted more or less until the mid 1930's. In particular, 1926 saw the largely unsuccessful general strike, and this explains why Council had little success with its membership drives. It also perhaps helps to explain some of the other events of that period.

Thus in April, 1925, the Council investigated a case in which it was alleged that a member had been improperly treated and succeeded in obtaining justice.

The Council was also asked to set suitable scales of remuneration for professional inspection work, but felt unable to do so. Indeed, this question has been raised at intervals throughout our history, the last time being in 1965 (see section 12.5.), but no precise answer has ever been possible.

A few members, no doubt trying to increase their earnings in difficult times, were cautioned by the Council for unprofessional conduct. Thus, in July, 1925, there was a gentleman who printed "Member of I.E.I." on his notepaper, when he was not even an Associate, and the Council demanded an apology. Several others were cautioned at different times for "improper solicitation of professional work", usually by advertising.

In July, 1926, the Council agreed to support a Bill which was to come before Parliament for "the registration of, and to regulate the qualifications of engineers". Council minutes do not record the outcome of this.

In an attempt to assist members to get employment in hard times, Council started negotiations with the Board of Trade, and set up a special committee to deal with employment.

A proposal was put forward in October, 1927, that a pamphlet should be prepared, which should include as the objects of the I.E.I., "to collaborate with manufacturers . . . with the object of maintaining and improving quality". For some reason this proposal was not accepted by Council who thought that manufacturers might not like it. This is the first mention of "quality" in Council records, and an interest in "Quality Control" was still some years away. The pamphlet was later sent out in modified form.

4.3. Technical Proceedings

In April, 1928, the Council decided that the I.E.I. should hold the copyright of all papers published in the Proceedings (i.e., the Journal). Rules were drawn up for those submitting papers, and included was the statement that a paper may not be read at a meeting, or published in the Journal, until approved by a sub-committee of the Proceedings Committee.

Papers were not, in fact, very easy to come by and a suggestion was made—but not accepted by Council—that every new member should have to contribute a paper.

PART 5. 1929 to 1932.

THE MISSING YEARS.

5.1. The General Situation

The whole of the Council records from the middle of 1929 until April, 1932, have been lost at some time. As a result, we have only very sketchy information about this period, derived from members' notes in the Journal, and from a few isolated records which do survive.

Financial difficulties must have continued unabated, because when records were resumed in 1932, the situation was still as bad as ever. The depression was ever present and the

Institution dinner arranged for the spring of 1930 had to be abandoned for lack of support. Undaunted, the Council arranged a dinner dance at the Connaught Rooms the following November 5th. An Editorial in the Journal for October, 1930, deplored the depression and declared that "The British Empire is at stake". It then stated that several branch railway lines, plus some 100 stations had been closed.

On 26th June, 1930, a visit was arranged to a "Moving Picture Exhibition" at Bush House. The Journal states that pictures with sound are usually associated with entertainment, but these films deal with commerce and science. Another interesting piece of terminology is that, at that time meetings were often advertised as "illustrated with lantern slides".

The usual dinner dance in the autumn of 1931 was arranged but, in the spring of 1932, Council decided not to arrange a dinner, in view of the political situation and impending general election.

Up to this time, the Proceedings—that is reports of papers and discussion presented at meetings—had been published quarterly, and there was, in addition, from time to time, a Gazette or Bulletin, giving notes and news of members. From January, 1932, these were combined into one volume, under the cover title of "Inspection."

5.2. The Branches

For some time, there had been three branches:

1. The Scottish Branch based on Glasgow.
2. The Manchester Branch.
3. The Ruhr Branch, based on Essen.

These were not, however, Branches as we know them today. They appear rather to have been areas where there was an accumulation of members, who had informal contact with each other.

In June, 1929, the Membership Committee proposed that:—

1. Local Honorary Secretaries should be appointed in engineering districts.
2. A list should be compiled of practising engineers, especially including non-members.

Secretaries were duly appointed to the three Branches and, in April, 1930, a fourth Branch was formed for the North East coast, based on Darlington. This had its own committee as well as Hon. Secretary and is, therefore, sometimes loosely called the first official Branch. It ceased to exist in 1950.

From 1931, the Branches received financial assistance from Headquarters.

PART 6. 1932 to 1935.

CRISIS: SHOULD THE I.E.I. BE WOUND UP?

6.1. Financial and Other Problems

By 1932, Mr. C. J. Wharton's health was beginning to fail, and he had been absent from Council meetings on a number of occasions, during the past two years. Now he was ill again, and when in July he resigned Eng. Rear Admiral W. G. Heppel became Honorary Secretary and Lt.-Col. King Honorary Treasurer.

Finance was still a major cause for concern and again it was agreed that more members were necessary, but there were not to be "mass admissions". It was a sign of the times that no more visits to firms were to be made. Few members now could attend them in working hours.

Meanwhile, Mr. Wharton was trying to dispose of the lease of the office he used as a Consulting Engineer and part of which the I.E.I. was still using as its Headquarters. Council was obviously very indebted to Mr. Wharton, not only for his work as Secretary but because he was still

taking only £288 instead of £416 per annum for rent and clerical assistance (see section 4.1.). Furthermore, his office housed Miss Jardine, who had been a faithful clerical assistant to the Institution for many years. Council therefore agreed that they would continue to pay their rent/clerical assistance contribution until Mr. Wharton disposed of his lease, or until the end of March, 1933, provided Miss Jardine remained in service.

In September, 1932, Mr. Wharton requested the Institution to pay £300 owing for rent, etc., but the financial position was such that Council regretted they could not authorise payment until the New Year when subscriptions would begin to come in again.

In spite of this, by December the Bank Account was £33 2s. 5d. overdrawn, with some £180 in bills still waiting to be paid. Some members hit by the depression had resigned, and there was also a loss of advertising in the Journal.

Council therefore made the following decisions in the interests of economy:

1. There would be no dinner in the spring (1933).
2. Preparation of a new list of members would be deferred.
3. Cheaper printing of the Journal was sought. Five quotations were obtained ranging from £104 to £120 per annum. In order to keep the job, the printer who already had the contract reduced his price from £120 to £108 per annum and this was accepted by Council.

In April, 1933, the Institution leased Room 58 at 17, Victoria Street, London, S.W.1., at a rent of £65 per annum and Headquarters moved there, thus freeing Mr. Wharton's office. This was therefore the first Headquarters of its own which the I.E.I. had, since they had always previously shared an office belonging to someone else.

The Institution also took over Miss Jardine from Mr. Wharton "at a reduced salary of £3 per week". One is bound to feel sorry for Miss Jardine. She had worked for the Institution for a long time, seldom missing a Council meeting. The Council minutes of this period are all written in the most painstaking longhand, and I suspect that it must be her writing, rather than Mr. Wharton's, because the writing continues, even when Mr. Wharton was away ill. Now Council had, with regret, to ask her to take a salary cut, and since she accepted it, we must conclude that she was either too loyal to leave, or that she could not get a better job anyway.

At the Annual General Meeting that year, the Auditor, Mr. Wild, who had audited the accounts for many years without charge, said he regretted he could not continue unless he was paid £5 5s. 0d. per annum. Council could not afford this, since they had no cash in hand, and it was still only the spring. Another auditor who would act in an honorary capacity was therefore found.

The President, Lt.-Col. H. M. Greenly came to the immediate rescue and guaranteed to make good if necessary, a bank overdraft of up to £100. The Council realised that, if it could not make the Institution solvent, it would have to be wound up, and at its meeting on 9th May, 1933, it seriously considered this drastic step, as a last resort. In June, it set up a Committee to advise on making the I.E.I. solvent and, meanwhile, imposed further economies:—

1. There was a great reduction in the number of free copies of the Journal.
2. Council members agreed that they would each pay their subscriptions immediately for 1934 and 1935.
3. The landlord was persuaded to reduce the office rent by £5 per annum and an agreement was made with him to share the services of Miss Jardine. Her salary would be restored to £3 10s. 0d. and each would pay half.

Meanwhile the Bank overdraft continued to rise. It was £63 16s. 9d. in July, 1933, and seemed to be heading for around £140 by the end of the year.

On 9th October, a printed letter was sent to all members. In effect it asked:

1. Is there a useful purpose to be served by the I.E.I.?
2. Have you any suggestions?

To the first question, the reply was overwhelmingly yes, and although this was comforting, it was realised in retrospect that this information was meaningless since anyone who thought the answer was no, would not remain a member.

A further section was added to this letter when it was sent to members who were behind with their subscriptions, and this referred to "the injustice of asking a few members and staff to work in inadequate offices, for the benefit of those whose apathy is their only contribution. . . ."

6.2. The Engagement of a Paid "Organiser-Secretary".

On 5th December, 1933, the special committee recommended that the Institution should engage a paid "Organiser-Secretary" and, for this post, it proposed Mr. Reginald Pugh, B.A. It was made clear that this appointment was not to jeopardise Miss Jardine's salary or security, and indeed the agreement with Mr. Pugh is a most interesting one. In effect, it appears to put the secretary on a sort of "payment by results" basis.

It was relatively complicated, but was roughly as follows:—

1. Mr. Pugh would receive £150 per annum for provision of an office and staff, and he would also receive expenses.
2. The office was to be at Terminal House, 52, Grosvenor Gardens, S.W.1., and he would employ Miss Jardine there.
3. Mr. Pugh was to receive £200 per year, but he was not to draw anything until the annual income of the Institution exceeded £430. Any income above £430, however, was to be available as a first charge, to pay the £200. It would also be available to pay any arrears of the £200 payments due from previous years.
4. Later the agreement was modified so that, after earning his £200, the secretary also received 90% of anything over, up to a maximum of £500.

Mr. Pugh took over as both secretary and treasurer on 25th March, 1934, and a small liaison committee was formed to act as a link between him and the Council. At the same time Miss Jardine was released full time to the I.E.I., although as it happened, she resigned at the end of June, and was replaced by Miss Byatt.

At the A.G.M. in May, 1935, Mr. C. J. Wharton was elected an Honorary Member, an honour which he most richly deserved.

6.3. Turning the Corner

By the end of 1933, the dreaded overdraft was £67 13s. 8d., and bad as it was, this was considerably better than anyone expected. Clearly the measures taken by the Council were beginning to have some effect. The following spring, Council reduced the committees to four.

1. Proceedings Committee—to select papers for meetings, etc.
2. Editorial Committee—responsible for the Journal.
3. Selection Committee—to vet applications for membership.
4. Liaison Committee—combining the Finance and Membership Committees (see section 3.2.).

The Liaison Committee was disbanded in December 1934.

Gradually the financial position improved and, from 1936 onwards, became satisfactory again. Mainly this seems to have resulted from the bold and imaginative agreement with Mr. Pugh and the formation of new branches but, in the late 1930's, it was also in part due to the growth of the aircraft industry, which greatly increased the potential membership.

In July, 1934, Council decided that:—

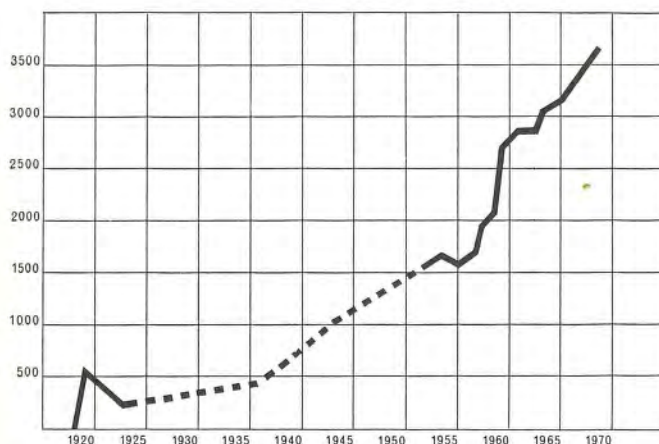
1. Free refreshments would no longer be supplied at meetings.
2. Advance copies of papers would be abridged, wherever possible.
3. Entrance fees would be discontinued to encourage new members.

The following April (1935) they decided to create a new grade of membership to be called Graduate, with a subscription of 12s. 6d. per year. This was to be for "those training or trained for engineering inspection, but not yet qualified to be either an Associate Member or a Member". Graduate was thus roughly equivalent to "Student" today. Foreseeing that other grades of membership might follow at a later date, Council called a special General Meeting on 9th May, at which the members gave them power to create other grades, as required. However, the Board of Trade would not accept such wide powers and a further special General Meeting was held on 12th December at which members rescinded the first resolution and merely gave Council powers to create the specific grade of Graduate. Subscriptions for the other existing grades were still as given in Section 3.1.

6.4. Assessing the Number of Members

The illustration shows how the number of members has grown over the years but, in reading it, some caution is necessary. At any moment in time, our membership consists

Graph of Growth of Membership



of some people who have paid their subscriptions, plus some who have not. In the middle of January, a considerable number of those who have not yet paid, can reasonably be expected to do so, whereas in say October, most of those who have still not paid, probably do not intend to do so. The total number of members quoted at any one time depends on just how those unpaid people are assessed and how long elapses before they are struck off. At times this period seems to have been excessively long, leading to an optimistic membership figure. Thus our Secretariat, who prepared this illustration, have dotted some parts of the curve, where they are uncertain of the method used to assess the figures given in the Institution records.

PART 7. 1936 to 1939.

THE GROWTH OF THE BRANCHES.

7.1. The Branches

For two years Council had devoted almost all its attention to the financial crisis and now at last it could turn its attention to the Branches, where by this time the Ruhr Branch had ceased to exist, and the Manchester Branch had become inactive (see section 5.2.).

On 29th April, 1936, a meeting was held in the Chamber of Commerce at Birmingham, in order to found a Birmingham Branch. It was addressed by the President, Major H. Myers of the Air Ministry and thus, what became known as the Midlands Branch, was formed. In the following

The Birmingham Inaugural Meeting Notice

IMPORTANT NOTICE

The Institution of Engineering Inspection

President: Major H. MYERS, A.M.Inst.C.E.

Vice-Presidents:
DAMER DAWSON
Lieut.-Col. H. W. S. OUTRAM, C.B.E., T.D., A.R.S.M., F.R.A.S., A.M.I.E.E.
Secretary: REGINALD PUGH, B.A.

It is proposed to form a Birmingham Branch of the Institution of Engineering Inspection, and for this purpose a Meeting of all interested will be held at THE CHAMBER OF COMMERCE on April 29th, 1936, at 7.30 p.m. when the President, Major H. Myers, of the Air Ministry, will outline the advantages of Membership

Inspection is of vital importance these days, and those who are qualified by their experience and position in various Works, should safeguard their position by becoming Members of the Institution

All who are interested are invited to attend the Meeting, and there will be no obligation to join if, after having heard the objects of the Institution, you do not feel disposed to apply for Membership

The Chair will be taken by Major H. Myers, A.M.Inst.C.E.

PLEASE MAKE A POINT OF ATTENDING

Secretary: REGINALD PUGH, B.A.
The Institution of Engineering Inspection
British Industries House
Marble Arch, London, W.1

December, Council agreed that the local committee should see and be allowed to comment upon applications for membership from persons residing in the Midlands.

Meanwhile, the North East Coast Branch had unsuccessfully asked Council if their committee members could have expenses for attending meetings. Perhaps, understandably at this time, the Institution paid no expenses to anyone, lecturers, Council members, etc., included.

In the spring of 1937, the Midlands Branch nominated a candidate to stand for Council, and he was successfully elected. The North East Coast did not offer a candidate; they had no one who could spare the time or afford the fare.

On the 15th June, a "Factory Inspection Group" was formed in London. This was a specialised group which concerned itself with the implications of the new Factories Act which had just become law. It only lasted until September, 1938, when its leader Mr. Ronca resigned through ill-health.

The inaugural meeting of the Sheffield Branch took place at the Victoria Hotel in Sheffield on 10th March, 1938. Some 75 people attended and the Branch was successfully launched.

Thus by midsummer, the North East Coast Branch was reported "strong", Sheffield had 63 members and the Midlands 93. So keen were the Midlands that, in October, they held an inaugural meeting in Coventry Technical College and the 150 or so people present agreed to form a Coventry Branch.

Next came Manchester, where the Branch was revived at an inaugural meeting on 8th November, 1938.

Enthusiasm then spread to India, where Mr. Chakraborty proposed to form a Branch. Regretfully, Council turned this suggestion down because Indian members were so few and so widely scattered.

In Bristol, however, some 300 people attended an inaugural meeting in the Merchant Venturers' Technical College on 26th January, 1939.

The growth of active Branches was thus most satisfactory but, at the same time, it created problems. Each Branch operated to its own rules and it became necessary to standardise these. There had also been complaints that the practice of allowing Branches to vet applications for membership in their own areas had resulted in unfairness. Some Branches it was alleged, would recommend Council to accept qualifications which another would reject.

Council therefore decided to call a meeting of the Chairman and Secretary of each Branch with the President and other Council members. Thus, on 31st March, 1939, the very first "All Branches Meeting" was held at the Cosmopolitan Club in Birmingham. The date had been carefully chosen to precede the A.G.M. in London on 22nd May, so that any business requiring it could be referred to the latter meeting. There were 23 delegates and they agreed:—

1. To discuss the standardisation of Branch rules.
2. That, although Branch committees were entitled to recommend the grade of membership an applicant should be allotted, the Council made the final decision. (This always had been so and was merely a re-emphasis of this fact.)
3. Funds provided to Branches from Headquarters were to be used for meeting rooms, postage, circularising, etc. Fees or expenses were not to be paid to lecturers. (Delegates attending the A.G.M. not only had to pay their own fares, they also had to pay for their own supper!)

On the 3rd July, the President planned to visit Glasgow, to consider a Branch there. As it turned out, he was prevented by the now imminent threat of war, but this fact is of interest because it shows that the Scottish Branch, which we reported in 1929 (see section 5.2.) must, at some time since then, have ceased to exist.

7.2. Activity at Headquarters

As we said in Section 6.3., the measures taken by Council in 1934 enabled the Institution to pull gradually out of its financial difficulties. Membership increased and with it, the gross income, as the following figures show:—

Year	Income
1934	— £529
1935	— £747
1936	— £798

For his work in 1935, the Secretary was paid £210 18s. 3d., and by October, 1936, Council declared that the I.E.I. was now solvent.

Early in 1936, the Secretary moved Headquarters office to British Industries House at Marble Arch, because the rent was cheaper. However, the move was short-lived because a change of directorate eliminated the favourable terms at B.I.H. and, in June 1937, Headquarters returned to Terminal House, 52, Grosvenor Gardens.

The distribution of membership is shown by the following

figures, which were presented to Council in September, 1937:

Honorary Members	— 12
Members	— 234
Associate Members	— 162
Graduates	— 24
Associates	— 7
Affiliated Firms	— 16
Total	— 455

By May, 1938, the number of members had risen to 575 and the Secretary's honorarium for 1937 amounted to £421 16s. 5d.

In July the Council spent some time considering qualifications for membership and it made the following interesting decisions:—

1. Amongst Service personnel, full membership of the Institution would be reserved for "Officer Classes" whilst the corresponding civilian qualification would be a University degree, or corporate membership of a Chartered Institution.
2. The possibility of the Institution running its own examinations was discussed and deferred. Indeed, this question came up many times before examinations were finally introduced in 1960.
3. It was decided to prepare notes for the guidance of candidates, proposers and seconders, primarily with the object of reducing the number of instances where the candidate had stretched the truth intolerably far, in the hope of getting a higher grade of membership!

There was still some difficulty in filling the Journal, which was by now called "Engineering Inspection" and it was therefore decided that each Branch should be allocated space, which it was expected to fill. More advertisements were still required, so Council were very pleased when, in September, 1938, the Coventry Gauge & Tool Co. Ltd., took a whole page advertisement.

PART 8. 1939 to 1946.

THE EFFECT OF THE SECOND WORLD WAR AND ITS IMMEDIATE AFTERMATH.

8.1. Wartime Activities and Difficulties

On 3rd September 1939, war was declared with Germany and a rigid black-out was immediately imposed. Heavy air raids were predicted and, since our Headquarters at Terminal House had no adequate protection, the office and staff were evacuated to 5, Pierrepont Street, Bath, whilst all the Institution records went to Romsey for safe keeping. Social functions were suspended and generally, both in London and the Branches, meetings became very difficult. Members naturally wished to get home as quickly as possible so as not to be caught out in either the black-out, or worse still, an air raid. Many, too, were working very long hours supporting the war effort.

In London, evening meetings of the Institution were discontinued at first but, when air raids did not materialise, they were resumed in the early part of 1940. In Bristol, the Merchant Venturers' College was not available and so meetings had to cease until April, 1940.

The war also affected people's nerves. At the end of 1939, the secretary in Sheffield resigned after a disagreement with the chairman, and a little later, there was also dissension at Coventry. By February, 1940, both the Birmingham and North East Coast Branches had suspended activities because their members were scattered and working very long hours. Shortly afterwards Manchester was reported to be inactive, partly because the chairman was ill, and

partly because the secretary was working long hours. At the end of 1941, there was also disagreement in the North East Coast branch and, in February, 1942, the secretary at Bristol resigned, and was replaced, because his official duties left him insufficient time.

Supplies of paper for the Journal became difficult and, to economise, it was reduced in size and smaller type was used.

In contrast, on 23rd November, 1942, an inaugural meeting was held to form a new Branch at Wolverhampton. Meanwhile Birmingham, Sheffield and Coventry all reported little or no activity.

Wolverhampton continued to thrive and, in October, 1943, reported attendances of 50 to 60 at meetings. Bristol also appears to have just about kept going. At the end of 1943 Council decided to attempt to revive the other Branches and, on 17th March, 1944, Sheffield had a "revival" meeting and was re-named the Yorkshire Branch. About the same time a small Branch was also formed in Oxford.

In the early part of 1945, both London and the North East Coast reported renewed activity and, on 20th November, an inaugural meeting was held to re-establish the Glasgow Branch. Some 200 people attended. Yorkshire held a successful meeting on 18th January, 1946, in order to get itself back to activity but, although some 50 to 60 people attended, it seems to have struggled for some time.

8.2. Financial and Membership Problems

So many members moved their location on account of the war that keeping track of them was very difficult and attempts to issue a complete list of members were abandoned. Council pondered whether to reduce subscriptions during the war, but decided that this was not practical because so many expenses would still be incurred. Where members were in the forces with a rank of N.C.O. or less, however, they agreed to "freeze" the membership if requested, i.e., there would be no subscription or membership benefits for the duration but then membership could be resumed without application formalities. Attempts were also made to prevent Bankers' Orders continuing to be paid on behalf of members in enemy occupied territory.

By December, 1939, Council felt strong enough financially to be able to release Col. Greenly from the £100 guarantee he entered into in 1933 (see section 6.1.). It had not been necessary to use it for some 5 years. Indeed, by May, 1940, Council were able to pay the Secretary £145 owing to him from past years and, in addition, some £300 was invested in the Post Office Savings Bank. Thus, finances were, in general, no problem. Although members were constantly being lost through moving away, or getting called-up, expenses with such little activity were moderate and reserves gradually built up.

In February, 1944, the total number of members reached 1,200, including suspended members and also 10 honorary members and 17 affiliates.

Early in 1945, Council investigated the possibility of getting a Royal Charter, but found they were not being issued during the war. (This objective still remains in 1969.)

In the summer of 1946, the General Purposes Committee was re-established (see section 2.5). It was "to investigate and report on such questions as the Council referred to it and to meet at the instance of the President, to consider any urgent business". It was also to consider the desirability of the Institution conducting its own examinations.

By October, 1946, the Institution had some 1,900 members, divided between the Branches as shown. These figures are probably not very accurate because, when in 1949 attempts were made to get accurate figures, the membership totalled only 1,600 (see section 9.1.):

London	—	560
Bristol	—	230
Manchester	—	220
Birmingham	—	215
Yorkshire	—	210
Coventry	—	125
Scotland	—	110
Wolverhampton	—	80
North East Coast	—	45
Oxford	—	40

8.3. Celebrations including the Silver Jubilee

On 26th March, 1941, a luncheon was held in honour of Lt.-Col. J. H. M. Greenly, a Past President who, in the New Year's Honours List, had become Lt.-Col. Sir John Greenly and, on 5th June, 1944, Sir Stafford Cripps was guest of honour at a luncheon given by the Institution.

The Silver Jubilee anniversary of the founding of the Institution occurred on 1st April, 1944. With the pressure of wartime, however, it was later in the year before Council considered how to celebrate it and decided to hold a luncheon at which it would invite Mr. Wilmot, Minister of Production, to be the chief guest. Unfortunately, Mr. Wilmot had to go abroad so the luncheon was not held until 29th November, 1945, when some 100 members attended. This may seem to have been a lot of luncheons but it must be remembered that, in wartime, evening meetings of large numbers presented difficulties and, in the event of an air raid, were positively dangerous.

8.4. The Past Presidents' Award

On 18th September, 1941, Council held a luncheon for all Past Presidents, with a view to founding a Past Presidents' Award, to which all past Presidents were to be invited to subscribe. In October the award was announced as follows:

1. The award would be given for the best paper for either reading or publication produced from 1st July one year to 30th June the next year. It would be judged for its originality or its advancement of technology or inspection.
2. Its value, dependent on funds, would be at least £5, given in books, scientific instruments, etc.
3. The Presidents' decision would be final, and the Institution reserved the right to publish the winning paper.

The Past Presidents' Award still exists today and the table on this page lists all the winners of it.

8.5. Quality Control

The first mention of Quality Control in the Council records occurs in March, 1942, when Government sponsored attempts were being made to introduce "Statistical Quality Control". Council pointed out that the Institution had called attention to Quality Control as early as 1935 and the Journal corroborates this since there are several Quality Control articles in the Journals of the 1930's.

At the end of 1942 our Coventry Branch liaised with the "Coventry Statistical Quality Control Discussion Group" and, in April, 1943, Mr. Rissik gave a lecture on Quality Control to I.E.I. members.

In March, 1944, Air Commodore Sowrey expressed concern at the loose way in which the term Quality Control was used. He then went on to propose that the I.E.I. should be renamed "The Institution of Quality Engineering". Unfortunately, this proposal met with opposition and was dropped.

Winners of the Past Presidents' Award

Year	Past Presidents' Award	Award of Merit (see section 11.1.)	Exam Prize
1941/42	E. A. Farthing		
1942/43	Dr. E. Gregory		
1944/45	D. P. Muirhead		
1945/46	No award made		
1946/47	No record		
1947/48	No record		
1948/49	A. H. L. Trapnell		
1949/50	No record		
1950/51	J. R. Cornelius		
1951/52	Dr. E. Gregory		
1952/53	Maj. P. A. Cartwright		
1953/54	No record		
1954/55	A. J. Abbott		
1955/56	J. Rockley		
1956/57	H. L. Boutflower		
1957/58	H. A. Simmons		
1958/59	R. H. S. Lesser		
1960*	L. W. D. Pittendrigh	R. K. Young	
1961	K. L. Smith	R. H. S. Lesser	
1962	L. W. D. Pittendrigh	D. J. Hewitt	
1963	R. H. S. Lesser	G. A. G. Saywell and R. Harrison	R. Beech
1964	Syndicate from Coventry Branch	L. W. D. Pittendrigh and B. Whitehead	S. E. Ashby
1965	A. J. Miller	A. A. Townsend	G. M. Carpenter
1966	No award made	No award made	D. E. Gorrell
1967	Still under consideration		

* Re-adjusted to be a complete calendar year.

PART 9. 1947 to 1953.

FURTHER DEVELOPMENT OF HEADQUARTERS AND IN THE BRANCHES.

9.1. Problems and Progress at Headquarters

In 1947, Council decided to terminate its contract with the secretary and, after negotiation, it was agreed that he should leave on 31st December. Whatever the reason for this decision—and such matters are rightly confidential to the Council of the time, and not recorded in the minutes—it should be remembered that Mr. Pugh had seen the I.E.I. from a state of financial desperation through a World War to a healthy financial and membership situation.

Council set up a small committee to carry on the secretarial work and try to find new office accommodation.

In January, 1948, Capt. H. P. Middleton, who had recently retired from his post as Chief Inspector of Naval Ordnance, was appointed Honorary Secretary, using his own house as the office and receiving a fixed honorarium which the Income Tax authorities were later to declare a taxable salary.

With the assistance of Mr. A. Vernon Watson, who was to become President in 1949, the first complete register of members was drawn up by circularising all those believed to be members and, in 1949, an office was set up at 28, Victoria Street, London, S.W.1, and a list of members, albeit incomplete, issued. Mr. Vernon Watson also undertook co-editorship of the Journal and responsibility for the appointments register.

By 1952, as a result of these efforts, the records of the membership had been put on a sound basis and it was established that it had reached 1,600.

In 1948 the Selection Committee was renamed the "Membership Committee." Council agreed that membership requirements should be more stringent and confirmed that its objective was to become a Chartered Institution. Nevertheless, it was not yet in favour of the I.E.I. holding its own examinations.

Glasgow Convention Dinner—St. Enoch's Hotel, 14th September, 1951.

Top table, left to right:—W. J. E. Black, Mr. Jeeves, Miss Nicholl, A. J. Cox, Brig. E. M. Ransford, C.B.E., Mrs. Stabler, Mr. Gordon Jackson, Mrs. Gregory, A. Vernon-Watson—President of the I.E.I., C. A. Oakley, Mrs. Vernon-Watson, G. B. Stabler, P. Fordham, Dr. Edwin Gregory, P. A. Cartwright, Mrs. Black, Capt. H. P. Middleton, R.N.



In October, 1949, the Council decided that subscriptions would have to be raised to the following:—

Member	—	£3	3s.	0d.
Associate Member	—	£2	2s.	0d.
Associate	—	£3	3s.	0d.
Graduate	—		12s.	6d. (unchanged)

They also decided that all the existing Associates should be renamed Companions so that the term Associate could be used for a new grade, to be defined as "persons over 23 years of age, having an engineering apprenticeship or equivalent, and being in engineering inspection".

In December, 1949, Council decided to engage Mr. Vining as an Assistant Secretary and, in the following February, they purchased a Chubb New Record Fireproof Filing Cabinet for records. In January, 1951, they acquired an addressing machine to avoid the expense of paying to have this done by an agency.

The question of introducing examinations was again raised and, in June, 1952, a committee, of which Major P. A. Cartwright was the mainspring, produced a Handbook of Engineering Inspection covering 376 pages in draft form. This was produced as a basis for the Institution's examination syllabus. However, in parallel with this, the City & Guilds of London Institute had been working on the same lines and introduced the Mechanical Engineering Inspection Course; Council therefore adopted the C.G.L.I. Certificate in this subject as a qualification for Associate Membership, rather than introducing its own examination.

In May, 1953, Council decided to discontinue the "Diploma" issued to new members and to give them instead a "Certificate of Membership". This brought the I.E.I. into line with other Institutions and effectively only meant a change in wording on the document issued to new members.

9.2. The Branches

By April, 1947, the Branches were spreading out to such an extent that it was necessary to define their boundaries, to avoid an overlap. Hence precise boundaries were set for every Branch, except Oxford, which had ceased to exist.

In 1948 the Yorkshire Branch reverted to being the Sheffield Branch and, on 22nd April, a meeting was held to revive the Manchester Branch, which was then renamed the North Western Branch. The way was now clear to form a Leeds Branch and this came into being about June.

In September, Council regularised the system of making grants to Branches, by devising a scale by which the payment was roughly proportional to the number of members in each Branch. Also, for the first time Branch members were able to claim 3rd class rail fares for attending committee meetings, but not Council meetings, and Branches were authorised to pay lecturers' travelling expenses. (Since 1946 Branches had been allowed to entertain to dinner a "guest" lecturer, i.e., one who was not a member of the Institution.)

At the end of 1948 the Scottish Branch became the West of Scotland Branch and, in the following year, the Bristol Branch became the South Western Branch.

In June of the same year (1949), Council brought the Branch rules up-to-date and arranged an All Branches Meeting in Birmingham on 29th October. As in 1939 (see section 7.1.), the Chairman and Secretary of each Branch were invited to meet the President but, this time Council agreed to pay the fare of one representative per Branch! The second representative had either to pay his own fare, or stay away. It was agreed that, in future, there should be an annual A.B.M.

Around the turn of the year, Council agreed that:—

1. "Branch Membership" at 7s. 6d. per year could be offered to persons who were otherwise ineligible for membership of the Institution and that this would entitle them to attend meetings of that Branch only.

2. "Branch Groups" could be formed to cater for members living a long way from the Branch centre, and these would be part of, and controlled by, the parent Branch. When a Branch Group had 50 members, not less than 10 of whom were full members, it could apply to become a Branch in its own right.

3. Branches would be financed by a fixed grant of £10 per year, irrespective of size, plus a capitation allowance of 5s. per member, irrespective of grade.

By May, 1950, the North East Coast Branch had ceased to exist and its unspent funds were transferred back to Headquarters. During the same year, a new Branch was formed in New South Wales, Australia.

At the next All Branches Meeting on 23rd September, 1950, it was suggested that lapel badges should be available to members. Council, however, was afraid that they would be expensive, that members would not buy them, and that the project would therefore be a drain on funds. In March the following year it did, nevertheless, agree:—

1. To raise the Branch allowance per head from 5s. to 7s. 6d.
2. To pay 3rd class rail fares for Branch delegates attending Council meetings, plus £1 if they had to stay overnight.

From September 13th to 15th, 1951, the Institution held a Convention in Glasgow as their contribution to the Festival of Britain. Each morning was devoted to technical lectures, the afternoons to visits to engineering and shipbuilding companies and, on the last day, which was a Saturday, a tour of some of the attractive scenery in the neighbourhood, including Stirling and Callender. On the Friday evening there was an Institution dinner, a photograph from which is reproduced on the previous page.

During 1952, Branch developments included the following:—

1. The term "Branch Membership (1 above)" was changed to "Branch Subscriber", so that there was no implication of membership of the I.E.I.
2. Each Branch was asked to appoint an "Area Editorial Member" for the Journal.
3. An Honorarium was given to Branch Secretaries, in appreciation of their services.
4. Branches were authorised to spend up to 1s. 6d. per head for refreshments at meetings.
5. For the A.B.M. on 24th October, 1953, Council agreed to pay the travelling expenses of two delegates per Branch and, in the same month, the Dundee Branch became the "East of Scotland" branch.

PART 10. 1954 to 1957.

THE IMPACT OF QUALITY CONTROL.

10.1. "Incorporating Quality Control"

We have already mentioned Quality Control in section 8.5. but, in March, 1954, the British Productivity Council (B.P.C.) proposed either the formation of a Society for Quality Control, or alternatively, that Quality Control should be incorporated as a branch of an existing society. The Council agreed that the Institution would be prepared to incorporate Quality Control and would, if necessary, change its name. Several possible names, including the "Institution of Quality Control Engineers" were suggested. In May, B.P.C. agreed that the I.E.I. should sponsor Quality Control.

During the summer, however, Council members seem to have had second thoughts because, in October, they voted by 11 to 2 against changing the name of the Institution. They would be pleased to co-operate with B.P.C., but would like to be quite clear what they were committing the Institution to do. At their next meeting in November, Council

decided against sponsoring a separate society for Quality Control but agreed that those interested in quality might be allowed to join the Institution, although not as corporate members. They might, for example, be given a title such as subscriber.

In January, 1955, Council agreed that the Journal might be called "Quality in Industry" but, in March they decided to defer any such change. A meeting in the summer with B.P.C. seems not to have been very conclusive, but in October, Council did finally agree that, starting in January, 1956, the Journal would be bi-monthly instead of quarterly, and that it would be called "The Inspection Engineer Incorporating Quality Control".

On 22nd December, 1955, an extraordinary General Meeting approved the changes to the constitution, so that it effectively admitted Quality Control as a partner with Engineering Inspection. The title remained "The Institution of Engineering Inspection" but the objects included:

"To promote and encourage the practice of Engineering Inspection and Quality Control in Industry. . . ." At the same time, membership regulations were altered to provide for admission on account of Quality Control or Engineering Inspection qualifications. In July, 1957, Council decided to add Quality Control to the Institution's emblem.

10.2. The Branches

On 2nd February, 1955, an inaugural meeting was held in Cardiff, and the South Wales Branch was formed. This was followed on 13th September, 1956, by a meeting in Fareham, which inaugurated the Southern Area Branch, catering for Portsmouth, the Isle of Wight, Southampton, Brighton, Winchester and Bournemouth. A North West Coast Branch, looking after the area west of a line from Preston to Lancaster was formed in November 1956.

In January, 1957, Council clarified representation on Branch Committees. It ruled that the Chairman and Vice-Chairman must be corporate members and so must a majority of the committee members, but with these provisos, Associates could be elected to the committee. By this time there were 14 Branches.

10.3. Headquarters and Membership Developments

In October, 1955, Mr. Vernon Watson asked Council to relieve him of the burden of editing and compiling the Journal and a special committee was set up to make proposals. As a result, the Journal was published and edited from January, 1956, under contract by Mr. M. J. M. Bosley of Techniprint, Limited, and the Secretary was responsible for providing the material.

The fluctuation during a year in the Institution's finances, which we discussed in section 4.1. can be clearly seen in 1955, when the "cash in bank" figure was given to Council every meeting, as follows:—

7th January 1955	—	£639*
8th February 1955	—	£1,405*
1st April 1955	—	£1,506*
9th June 1955	—	£1,741*
7th July 1955	—	£1,763
8th September 1955	—	£1,101
5th November 1955	—	£310
1st December 1955	—	£326
5th January 1956	—	£270
1st March 1956	—	£1,192†

* Periods when subscriptions come in.

† Subscriptions coming in again.

In May, 1956, Council agreed on a formula for members who would like to buy a "life" subscription to the I.E.I. and

this is still in use today (1969). It is as follows:—

Age

30	—	19 times the annual subscription
35	—	17½ times the annual subscription
40	—	16½ times the annual subscription
45	—	14½ times the annual subscription
50	—	12½ times the annual subscription
55	—	10 times the annual subscription
60	—	7½ times the annual subscription

By 1957, the cost of running the I.E.I. was rising and Council therefore decided to reintroduce entrance fees, which were suspended in 1934. Applicants for full membership, associate membership or companion were to pay two guineas, and associates one guinea.

The standing committees at this time consisted of Membership, General Purposes, Finance and Editorial. In December, 1957, Council had a very long discussion about ways of improving the status of the I.E.I. A number of proposals were considered, but by far the most important was its decision to introduce Institution Examinations. Dr. Merriman undertook to chair a working party to sort out syllabuses and other details. In preparation for this, the Student grade of membership was introduced in March, 1958, to cater for existing Graduates, so that Graduate could be reserved for those who had passed the examination.

In the middle of 1958 the Secretary asked to resign, and his place was taken by Commander J. Spencer, O.B.E., R.N., who was the first secretary to be engaged at a fixed salary. Capt. Middleton was presented with a greenhouse, his own choice, in recognition of his services to the Institution.

PART 11. 1958 to 1964.

A PERIOD OF EXPANSION.

11.1. The Introduction of the Institution Examination

In May, 1958, Dr. Merriman made interim proposals for the Institution Examination, and a provisional committee was set up to consider them. By autumn, 1960, this had been fully constituted as the Education Committee and it offered to Technical Colleges a lecture entitled "The Place and Function of the Inspector in Engineering". It also proposed to Council a list of qualifications which should exempt candidates from all or part of the Institution examination.

In the spring of 1961 it staged a very successful conference in Nottingham University. Some 76 delegates attended but others were turned away because no more could be accommodated.

Examinations started in the summer of 1960 with nine candidates but this increased to 21 in 1961, and by 1963, had reached 106. In January, 1962, the grade of Graduate was introduced for successful candidates who had not yet achieved the necessary experience for Associate Membership.

There was another Nottingham Conference in April, 1963, when the theme was "The Selection and Training of Inspection Staff" but the attendance was lower this time.

Later in the year, it was decided to split the Education Committee into two sub-committees:—

1. An Academic Sub-Committee looking after examinations.
2. An Industrial Committee looking after symposia and training in industry.

In 1964, the Industrial Sub-Committee organised symposia at Northampton College, London; Imperial College and Headington College in Oxford.

As the Institution's examinations progressed, and as general educational standards rose, so it became clear to the

Academic Sub-Committee that some revision to the examination syllabuses would be necessary to achieve the academic level being set by Council for Corporate Membership. It therefore completely revised the whole examination structure and, by the end of 1964, it was ready to launch the new version at a Conference to be held at Chelsea College of Technology in April, 1965, with the theme "The Educational Requirements of Professional Inspectors and Quality Engineers".

11.2. Organisation and Finance

Council realised that the introduction of examinations would require both adequate funds and a full-time staff. Although membership had progressively increased since 1956, Council regretfully decided in March, 1959, that subscriptions would have to be increased as follows:

Members and Companions	—	£4 4s. 0d.
Associate Members	—	£3 3s. 0d.
Associates	—	£2 2s. 0d.
Students (former Graduates)	—	£1 1s. 0d.

To improve the service given to members, however, the Journal was enlarged, the advertisement was eliminated from its front cover and its title was changed to "The Quality Engineer"; under the guidance of Mr. R. H. S. Lesser these changes started in January, 1960.

For some time Council had been looking for larger offices to accommodate the secretarial staff and, at the end of 1959, they agreed to take 616/618, Grand Buildings, Trafalgar Square, at a rent of £660 per year. It was occupied in February, 1960.

The winner of the Past Presidents' Award for 1958/59 was Mr. R. H. S. Lesser, and when he was asked what he would like as a prize, he replied that he would have "as many copies of 'The Quality Engineer' as it will buy". These he proposed to distribute as publicity for the Institution. Council were impressed by his good intentions but decided that it was not an appropriate prize and therefore asked him to choose a technical book.

In January, 1960, Mr. C. L. Acland was appointed Technical Officer to the Institution on a part-time basis and, by the end of 1960, the Institution of Production Engineers had formed a committee to advise on Quality Control. B.P.C. were also active in this field and Council decided to collaborate with other Institutions, etc., for the general advancement of Quality Control.

At the end of 1960, there were two papers which Council considered almost equally meriting the Past Presidents' Award. They therefore gave a second prize, which they called "The Institution's Award of Merit."

In September, 1961, the first conference was held at New College, Oxford, in collaboration with the Society of Non-Destructive Examination (S.O.N.D.E.). Some 185 delegates attended and the conference was such a success that it has been an annual event ever since.

By early in 1962 various changes to the secretarial staff, which had been going on for some time, were completed. As the Technical Officer had now left, the staff became:—

Secretary	—	Cdr. J. Spencer
Assistant	✓	Major P. J. Roe
Secretaries	✓	Major A. J. M. Watt
Registrar	—	Mrs. D. M. Bright
Typist		

By mid-1962 the number of committees had grown to the following:

- General Purposes
- Finance
- Membership
- Education (to look after examinations, etc.)
- Editorial (to look after the Journal)
- Quality Control

Group Captain R. McMillan, R.C.A.F., delivering a lecture at New College, Oxford, at the 1961 National Inspection Conference —Chairman D. J. Hewitt, Member of The Council.



Technical Papers (was merged with the Editorial Committee in 1963)

In April, 1964, Lieutenant-Commander T. A. Woolmer replaced Major A. J. M. Watt as Assistant Secretary.

The Institution tie was introduced in the autumn of 1963 and is still available (1969) from Headquarters at its original price of 16s.

About this time a number of new publications were issued including a monograph "An Introduction to Sampling Inspection" by I. D. Hill and one entitled "Thermocouples, their Instrumentation, Selection and Use" by B. F. Billing. A "Glossary of Terms for Quality Control" was compiled by the Technical Survey Committee under the Chairmanship of Mr. D. J. Hewitt. This was subsequently approved by the National Council for Quality and Reliability and was incorporated in the E.O.Q.C. Glossary which was eventually issued in five languages.

11.3. Branch Activity

Central London meetings were no longer considered adequate for so large an urban area so, in the autumn of 1958, it was decided to set up a formal London Branch, divided into four areas.

1. Middlesex, Berkshire, Buckinghamshire.
2. Surrey and South London.
3. Essex, Hertfordshire, Bedfordshire, North and East London.
4. Kent, Sussex and South East London.

On 21st November a meeting was held to try to revive a sagging North West Coast Branch but it was unsuccessful and, in January, 1959, the North West Coast Branch was closed and its members were transferred to the North West Branch based on Manchester.

Meanwhile, Council had agreed that Branch secretaries should be sent a quarterly summary of Council meetings.

In the summer of 1959 an inaugural meeting was held in Luton, and a Group was formed, which was later promoted to Branch status. Similarly in June, 1961, the Crawley Group was given Branch Status and, in July, 1962, a Gloucester Group was approved. Later in the year a second Branch was formed in Australia, this time in Melbourne.

In 1963, it was decided to have the All Branches Meeting on the same day as the A.G.M. This had the obvious advantage that delegates to the A.B.M. could also stay for the A.G.M. However, the A.G.M. must, by law, be in London and therefore it meant that the A.B.M. must also be in London instead of somewhere more central, such as Birmingham.

In November, two new Groups were formed:—

1. Essex and North East London, belonging to the London Branch.
2. North Herts, belonging to the Luton Branch.

About this time, groups were also formed in Bracknell and the Medway towns.

Starting on 1st January, 1964, Australia had three branches:

1. New South Wales.
2. Melbourne, Victoria.
3. Adelaide, South Australia.

The efforts of the Education Committee to increase educational facilities for inspectors led to a renewal of interest in the North East and a very active Branch was established in 1964, based on Durham.

In September, 1964, the London Branches became completely autonomous, like the other Branches.

PART 12. 1965 to 1969.

SHAPING THE INSTITUTION OF THE FUTURE.

12.1. Preparing for the next 50 Years

So we come to the last part of our history, and find the Council busily shaping the Institution of the future. Not all its plans have yet come to fruition, but it is both interesting and exciting to consider the possibilities.

12.2 Re-organisation of the Council

As we have seen, the Branches have grown progressively from small unofficial groups, to the very important position

they now occupy. In 1965, therefore the Council gave a lot of consideration to co-ordination and integration of the Branches with the Council itself. It decided to reorganise the Council itself and this took effect from the A.G.M. of 1966.

1. The Branches were grouped together into five Regions each with its own Regional Advisory Committee.
2. The Regions were and still are represented on the Council, on the basis of one Council member to every 250 members in the Region, as follows:—

	No. of Council Members
South Eastern Region	4
South Western Region	2
Midland Region	3
Northern Region	2
Scottish and N.E. Region	1

3. The Council itself was reconstituted, to contain:
 - 11 to 14 Regional Representatives (as in 2 above).
 - 10 to 12 National Representatives
 (i.e., not representing any particular region)

The National representatives were to be available for committee work, but the Regional representatives would make a special study of the problems in their own Regions.
4. The London Branches would have the Greater London Area Committee consisting of:
 - 2 members appointed by Council;
 - 2 appointed by each of the London Branches
 - 1 appointed by each of the London Groups;
 The whole of the above proposals still exist today (1969).

The Council in Session, 15th January, 1969—Anti-clockwise from the top

Lt.-Col. Lukis, R. J. Miskin, J. Bryan Cross, Cdr. R. B. Fairthorne, S. E. Goymour, G. A. G. Saywell, J. L. Baron, D. J. Hewitt, T. A. Woolmer, C. C. Gegg, P. J. Roe, Col. D. S. Squirrell, I. R. Smith, President, H. W. Lloyd, Maj-Gen. B. G. Ralls, C.B., Lt.-Col. H. A. Livock, F. Hodgkins, E. J. Walton, R. G. Lock, L. Smith, H. G. Rider, A. E. Parkins, R. H. Caplen.



12.3. Branch Activities

It had been felt for some time that, apart from arranging meetings during the winter season, the Branches should be more involved in the general work of the Institution. To this end the Technical Survey Committee suggested to various Branches that they should set up study groups to investigate various aspects of Quality Control in industry in their particular areas. One of the first results of this scheme was an excellent paper written by a group of the Coventry Branch on the selection and training of Inspectors. This paper created a lot of interest and was widely used in industry.

In 1964, and again in October, 1966, the South West Branch held two very successful three-day exhibitions and conferences in Bristol. Apart from the interest created in Quality Control in general in the area and in the Institution, they were also financial successes. Among the studies currently being undertaken by the Branches, the following may be mentioned:

Coventry: Improving the efficiency and output of Inspectors.

London South West: Quality Control for small batches.

Wolverhampton: The Training of apprentices for Inspection.

Gloucester: A survey of the use of Quality Sampling within their area.

Birmingham have slanted the whole of their 1968/1969 programme to a study of the Quality Car of the 1970's.

Also worth mentioning is a series of six lectures organised by the Crawley Branch at the Crawley College of Further Education; this short course of Inspection was heavily over-subscribed and the Branch intends to repeat it in the future. This last item is interesting in that, although there are 48 colleges who either do or will offer courses leading to the Institution's examinations, many more would do so if they could see a demand from industry. Throughout 1968, the Council and the Branches have been putting in hand their preparations for celebrating the Golden Jubilee of the Institution which occurs on 1st April, 1969.

12.4. Finance

It had been clear in 1964 that the accounts for that year would show a substantial loss and a 50% increase in all members' subscriptions was made from January, 1965, in

order to achieve a subscription income of £15,000 for the year and a total income of about £16,400. This was to provide a surplus to offset the loss in 1964, and also allow for an increase in office accommodation in 1965, providing a large Committee Room at Headquarters. With the steady increase in membership, which by the end of 1967 had averaged 170 per year over twelve years, it was calculated that the income should rise by £600 a year and the capital increase by £400 annually. But the country was suffering from an inflationary period and costs and taxes were continually increasing.

Thus, although the increase in income was achieved, the surplus which should have been available was swallowed up. By 1967 the Council had to face the alternatives of another increase in subscriptions, a reduction of activity or making economies. It chose the latter and the axe fell on the cost of the Journal which, in 1967, had been slightly less than £3,600, whereas it was argued that, in these days, by the sale of advertising space, it should largely pay for itself.

In 1967, the Editorial Committee put the task out to tender and, at the same time, the office took over the distribution of the Journal to non-members who then amounted to some 500 subscribers. By the end of 1968 a new contract for the compiling and printing had been made with John Morris (Publicity) Limited and W. H. Houldershaw, Limited. Under this contract, the Institution became the publisher and the advertising should increase. The terms of the contract are more favourable to the Institution and the opportunity has been taken to adopt the larger A.4 page size. During the year, the number of outside subscribers increased and Council will be able to balance the accounts for 1969 without raising subscriptions, assuming that the 1969 Conferences are a success and the expectations in the Journal account are realised.

12.5. Headquarters and Membership Developments

By early in 1965, the number of members had reached 3,000 and the Institution's activities had increased proportionately. Symposia, etc., continued and the Conference at Oxford had become an annual event.

The Technical Survey Committee had a look at the knotty problem of professional charges for inspection. This

The Sheriff of Bristol, Mr. F. A. Ashley, opening the QRY Conference and Exhibition, organised by the South West Branch of the Institution, at Bristol in October, 1966.



question was first raised nearly 50 years ago and has come up at intervals ever since, but no complete answer has ever been found.

National Quality and Reliability Year started on 20th October, 1966, and was staunchly supported by the Institution, not only from Headquarters but throughout the Branches.

During 1966, Council formed a Forward Planning Group, consisting of the Institution's office holders and the Chairman of the main committees. This group is responsible for looking ahead, and for submitting long term proposals to the Council. Thus, much of their work is behind the far-reaching proposals discussed in this section.

Also in 1966, the General Purposes Committee was amalgamated with the Finance Committee so that the Council committees at the present time (1969) are as follows:—

- General Purpose and Finance
- Membership
- Education
 - (containing an Academic Panel and an Industrial Panel)
- Editorial
- Materials Testing
- Technical Survey

At the end of December, 1968, the Secretary, Commander John Spencer resigned following personal bereavement. The vacant position has been advertised in the Journal but, at the time of writing (February, 1969), the Council have not yet made an appointment. Meanwhile, the affairs of the Institution are being very capably looked after by the Deputy and Assistant Secretaries. As this history shows, if we neglect various odd weeks, when we had "caretaker" secretaries, we find that, in 50 years, the Institution has had only four secretaries. This is quite an achievement and shows great loyalty on their part.

By 1st January, 1969, the number of members had reached 3,675, divided as follows:—

Members	—	574
Associate Members	—	2,221
Graduates	—	194
Students	—	34
Associates	—	649
Companions	—	3

There are now 25 Branches in this country and three in Australia.

12.6. The Professional Status of the Institution

As we said in section 11.1., the Education Committee duly launched the new examination structure at the beginning of 1965. In a profession in which the majority had, in the past, acquired their knowledge and skill by experience on the job, it had taken some years to raise the examination to the academic standards set by the Institution. It also required a great deal of effort to integrate our examination requirements with the rapidly changing national system.

By the time this change had been made the 13 Chartered Institutions in the engineering field, had, with Government support, decided to form a joint Council which was later to obtain a Royal Charter. The level set by this Charter for academic qualification as a chartered engineer is a Univer-

sity degree. At the same time it was realised that the engineering profession relied to a very great extent on technologists and technicians who had not attained degree level.

By 1967 the Council of Engineering Institutions, with government support, was ready to consider the formation of a similar body catering for non-chartered associations in the engineering field and the Institution, which had been one of the first to apply in 1966 for affiliation to it, was invited to take part in the discussions, one of the aims of which was to establish a national title for engineers not yet qualified as chartered engineers. Whereas the Institution has within its membership many Chartered Engineers, it is the Council's aim that its Corporate Membership, as a whole, should be recognised as qualified engineers in this proposed new category.

12.7. The Name of the Institution

The name, Institution of Engineering Inspection, had been discussed on a number of previous occasions but, in 1965, Council agreed that a change would be desirable. It therefore set up a special committee to consider carefully all the implications. Not only the name was involved. The Committee had to consider whether it was desirable to amalgamate with any other Society in a similar field. Further, any change of name would involve consequential changes to the Constitution and, possibly, to the examination structure. It should also be linked with the ultimate object of obtaining a Charter.

By January, 1967, the name Committee reported back. They had considered something like 50 alternative names and finally recommended to Council that the I.E.I. should become the Institution of Quality Technology. Many people in the quality field were not engineers and the Institution, it was argued, should be prepared to cater for them. After seeking the opinion of the Branches, Council gave its approval by 17 to 0 with two abstentions.

Unfortunately, the Board of Trade were unable to accept this proposal and, on 8th November, 1967, the Council agreed on an alternative but the change of name implies other changes in both our Memorandum and Articles of Association and, at the time of writing (February, 1969), the legal implications have not been completely sorted out.

12.8. The Next 50 Years

Our History is now up-to-date. I have recorded the problems our predecessors faced and the action they took to solve them. Mostly they were successful but, in a few cases, later events proved their actions to be not of the best.

Our story does not end in 1969 and, in several places, in this last section, I have had to record the position at the time of writing well knowing it may change very quickly. To me, Section 12 does not so much record the end of the first fifty years but rather the beginning of the next fifty. I wonder what events will be recorded by the member who is commissioned to write the History of our Centenary in the year 2019!

Acknowledgement

I should like to express my sincere thanks to the Secretariat without whose assistance my task would have been even more difficult than it was.