

SESSION



1909-1910

Minutes of Proceedings

AT THE

Annual Meeting

HELD IN THE

INSTITUTE PREMISES, 58, ROMFORD ROAD,
STATFORD, E.,

On Friday, March 18, 1910.

CHAIRMAN: JAMES DENNY, ESQ.

THE twenty-first Annual General Meeting of the Institute of Marine Engineers was held at 58, Romford Road, Stratford, E., on Friday, March 18, 1910, when Mr. James Denny occupied the chair.

CHAIRMAN: In the Report before us this evening we find another record of a year of prosperity and good work. The membership has risen during the session from 1037 to 1175, an increase of 138, which I think must be almost a record. Unfortunately we have the usual obituary notices of members gone from us, among which we are grieved to see the name of Mr. James Dixon. As to the financial position we find it quite satisfactory, for, although your annual subscription cannot be said to be heavy, although you provide liberally for all possible claims made against your funds, and although you have spent fully £410 upon your Transactions, on the year's working you are £112 to the good, and if you turn to

the Capital account you will find you have between £3,000 and £4,000 worth of property in one form or another belonging to the Institute. In the Report you will also note an interesting account of subjects dealt with by the Board of Trade Advisory Committee, on which you are represented by Mr. George Shearer. You will find there are some alterations proposed to the Articles of Association and By-laws, which will come before you in due course. The Awards and Lloyd's Register Scholarships are being fully taken advantage of, and you will also observe that, by the kindness of one of your members, Mr. A. Ritchie, the Graduate section has been induced to take an interest in this work. In the amusement section, if one may so call it, you will find there is no falling off. You will have to consider the subject of city premises, one which has been before you as a suggestion for a number of years. You have before you a report from the Committee appointed to investigate this scheme. No doubt this report will be discussed fully, for while we are all interested in the scheme, judging from what occurred at last year's meeting, we can hardly expect to be unanimous. There is the subject of "Education" and "Experience," that is reported upon, but it is somewhat too technical to understand just exactly what is meant; however, any member requiring further information can no doubt receive it from the Member of Council most in touch with the subject. Further there are reports in connexion with the Exhibitions at Shepherd's Bush and at Olympia, and you will note that on the Committees of both these Exhibitions the Institute is represented, and it must be gratifying to you to know that your President for the coming session, from the fact that he is your President, has been appointed President of the Olympia Exhibition. There is a report also from the Experimental Department. It is to be regretted that the Committee who look after this work do not give us some definite figures in connexion with the fuel experiments referred to, because that subject is one of very great importance, both to marine engineers and to our shipowning members and friends who have done much to assist this Institute. You will observe also the results of another section of your work, the Junior Section, and you will find that in spite of other calls on their time they are making progress also. On one occasion, though admittedly a festive one, there was a record attendance. The Library Committee

also give a record of good progress due to the spontaneous generosity of some of your members. The papers and lectures given, and the discussions in connexion with them, were both practical and instructive and should be especially helpful to those of our members who are engaged in practical marine engineering. The report also deals with the subject of Press Cuttings and Reading Room, while it is satisfactory to know that your premises as a whole are being kept and maintained in proper order. You will note that the Annual Dinner was successful, and if the same cannot be said for your Annual Ball it must be remembered that nowadays there are so many other forms of amusement that it is somewhat difficult to get the younger members, for whose benefit they are specially intended, to come in large numbers to these functions. There is also another point in explanation. Many of our younger members do not remain long in the Port of London, and it is pretty much a matter of chance whether many of them are here or not on the night of the annual ball, so the Committee should not be discouraged because the function last year was not so successful as anticipated. Your monthly Transactions are produced in excellent style and taste and quite deserve the popularity with which they are received by the members. You will observe also that your "outside activities" have been fully maintained and a comparative outsider like myself cannot but wonder how all your committees, departments and sections are kept going. An explanation can be found in the signature at the end of your report, that of Mr. James Adamson, who, one may say, is, so to speak, both the mainspring and flywheel of the Institute. It must be satisfactory to Mr. Adamson and to the rest of the members to know that during last session some recognition was made to him of the indebtedness of the Institute for the work he has done for it since its inception. So much was said at the time the testimonial was presented that nothing need be added now. Part of that testimonial was employed in procuring the portrait which will now be unveiled.

(The portrait was here unveiled.)

The portrait is a very excellent presentment of your Honorary Secretary, and we all congratulate Mr. Adamson upon that

fact. In conclusion, let me conclude with one word of congratulation to Mr. Adamson and his Council on their excellent report, and upon the successful work which has been carried out by the Institute during the year.

Messrs. P. Smith, R.N.R., and C. M. B. Dyer were then unanimously appointed Scrutineers on the motion of Mr. F. M. Timpson, seconded by Mr. Wm. Watson, and retired to carry out the duties and report during the course of the evening.

CHAIRMAN: Mr. Adamson informs me that Mr. Eadie, who produced this excellent work of art, is present, and no doubt you would like to recognize his presence and give him a hearty vote of thanks.

The motion was carried with applause.

MR. WM. EADIE: Mr. Chairman and gentlemen, I must thank you for the way in which you have shown your appreciation of the portrait. I have had very great pleasure in doing the work because I have had a long acquaintance with Mr. Adamson and have known of the good work he has done, not only here but elsewhere before he came to London. It was a great privilege to be selected to undertake the work, and I have done the best I could to hand down a work of art and value not only to the present, but I trust to future generations. I have endeavoured to represent, besides his physical appearance, to some extent his character, and of how far I have succeeded you are all, of course, quite able to judge. I must again thank you for your kindness in according this vote of thanks.

The Chairman then called upon the Honorary Secretary to read the Annual Report, as follows:—

Annual Report.

At the close of the financial year ending January 31, 1910, the twenty-first volume of our proceedings ended, and, as befitted the attainment of its majority, we have the satisfaction of recording a progress and extension which betoken that the life of the Institute is full of vigour.

MEMBERSHIP.

The membership roll on January 31 stood as under-noted and shows a good increase on the year's results :—

GRADE.	1909. Roll Jan. 31	Lapsed.	Trans. from.	Trans. to.	Died.	Re- signed.	Elected.	1910. Roll Jan. 31.
Past Presidents (Non-Members)	7	—	—	—	1	—	1	7
Hon. Vice-Presidents	1	—	—	—	—	—	—	1
Hon. Members	1	—	—	—	—	—	—	1
Members	796	43	—	20	12	14	163	910
Companions	62	6	—	—	2	2	22	74
Associate Members . .	69	4	6	1	—	1	7	66
Associates	45	1	3	—	1	1	7	46
Graduates	31	—	1	1	—	1	13	43
Probationary	25	6	12	—	1	2	23	27
Totals	1,037	60	22	22	17	21	236	1,175

OBITUARY.

We have, unhappily, to record, for the first time in the history of the Institute, the death of the President during his year of office. We have to record with regret the removal by death of the following names from the membership roll :—

Mr. JAMES DIXON (President), elected March, 1909; died July, 1909. Chairman of Lloyd's Register of Shipping.

Shipowner. (An obituary notice and portrait of Mr. Dixon appeared in the September issue of the Transactions.)

MR. JOHN G. DOBBIE (Vice-President), elected Member in April, 1891; died October, 1909. Superintendent Engineer, British India Steam Navigation Co., Calcutta, and subsequently at Glasgow. (An obituary notice and portrait of Mr. Dobbie appeared in the December issue of the Transactions.)

MR. JOHN BARTLETT (Member), elected July, 1900. Mr. Bartlett served his apprenticeship with Messrs. Oswald, Mordaunt & Co., of Southampton. He entered the P. & O. Steam Navigation Co.'s service in July, 1885, as engineer, was promoted to chief engineer in March, 1899, and died at sea on August 3, 1909, at the age of forty-six. The greater part of his service was spent abroad, he being for many years chief engineer of the s.s. *Isis* running between Port Said and Brindisi, afterwards being transferred to the s.s. *Oriental* running between Aden and Bombay, and also with the mails between Bombay and China.

MR. J. P. LLOYD DAVIES (Member), elected April, 1906; died May, 1909. Served apprenticeship with Messrs. Scott & Hodgson, Guide Bridge. Joined the Indian Coast Service of the British India S.N. Co. in 1893. In June, 1903, he was appointed as second engineer on the home line to the *Yamuna*, (afterwards sold to the Cunard Co., and renamed *Slavonia*,) subsequently serving in the *Carpentaria* as second engineer. In April, 1906, he remained on shore on account of his health, living with his brother, Dr. Davies, at Wolverhampton, where he died.

MR. WALTER LAMONT (Member), elected January, 1896. He served his apprenticeship with Messrs. John Lawson & Sons, of Glasgow. He afterwards went abroad and was for many years manager of the Colombo Iron Works, Limited. He died in 1909.

MR. HENRY R. MILLER, R.N.R. (Member), elected September, 1903. Mr. Miller was a chief engineer in the service of the Orient Steam Navigation Co., his appointment at the time of his death being on the s.s. *Orontes*. He died of cerebral hemor-

rhage on December 22, 1909, at the age of forty-five years. He served his apprenticeship with Messrs. Oswald, Mordaunt & Co., of Southampton, afterwards joining the Union s.s. Co. from 1884 to 1886. He then served with the Orient Co. as junior engineer on the s.s. *Orient*, s.s. *Ormuz*, and S.S. *Garonne* till March, 1889, afterwards being engaged by the Union Co. and South Western Railway Co. till 1894, when he rejoined the Orient Co. His appointments since that time were, fifth engineer, *Austral*; second engineer, *Orient*; second engineer, *Ophir*; chief engineer, *Orient*, *Omrah*, and *Orontes*.

Mr. LOUGHLIN MURPHY (Member), elected October, 1901. Mr. Murphy was born at Dublin in the year 1851 and served his apprenticeship at the Port of Dublin Shipyard. He afterwards went to Liverpool, where he served with Messrs. J. Jack & Co. for three years. He entered the service of the Mississippi and Dominion Steamship Co. in 1873, and was promoted to be Commodore Chief Engineer of the fleet at the early age of twenty-five years. Two years later he retired from active sea service and took up the commercial side of engineering, being at the time of his death senior partner in the firm of Messrs. Loughlin Murphy & Co., of Liverpool, representing various well-known companies and also practising as a consulting engineer. He was a member of the Royal Naval Reserve and was appointed a senior chief engineer in the year 1894.

Mr. J. N. B. NEWTON (Companion), elected November, 1896; died March 11, 1908. He was for many years a successful manufacturer and merchant in London, representing the firm of Messrs. J. A. Bremner & Co. In 1892 he went to reside in California, and remained there till 1898, when he returned to take an active part in his business.

Mr. WILLIAM SHARP (Member), elected February, 1896. He was born at Nonington, Kent, in June, 1835, and died March, 1909. He was educated at Barfeston Grammar School, Kent. He served his apprenticeship in his father's workshop at Nonington as a millwright and blacksmith. He volunteered for service in the Navy on the outbreak of the Crimean War, was drafted on board H.M.S. *Majestic* as an engine-room artificer, and at the end of the war he was discharged and received the

Crimean War medal. He afterwards served in the mail packets between Dover, Calais and Ostend, and with the General Steam Navigation Co. for three years as chief engineer of the s.s. *Wansbeck*. In 1892 he joined the Continental Steam Packet Co. as chief engineer, trading between London, Rouen and Havre. Two years later he joined the Tyne Steam Shipping Co.'s s.s. *Earl Percy* as chief engineer and was senior chief engineer in the Company for over twenty years, his last ship being the s.s. *New Londoner*. He retired in July, 1907, at the age of seventy-two.

Mr. ALEXR. SHAW (Member), elected January, 1895. Mr. Shaw was a native of Islay in Scotland. After serving his apprenticeship with Messrs. John Elder & Co., he joined, at an early age, the service of the British India Steam Navigation Co., where he was employed for over thirty years. During the greater part of his career he was engaged as chief engineer on one or other of the large steamers of the Company, trading mainly on the Indian coast. He died on November 23, 1909, while on board the s.s. *Satara* on a voyage to Australia.

Mr. EDGAR SPON (Associate), elected September, 1906. At the time of his death Mr. Spon was third engineer of the Imperial Lighthouse tender *Carnarvon*, and died at the Bahamas General Hospital on June 27, 1909. He was born in July, 1885, and educated at Deal College. After serving his apprenticeship with Messrs. Thos. Middleton & Co., of Southwark, he was employed in the drawing offices of Messrs. J. & E. Childs & Co. and Messrs. D. Napier & Sons, Engineers. For a few months he was on the s.s. *Somerset*, of the Federal Steam Navigation Co., as sixth engineer, and in January, 1909, was appointed to the *Carnarvon* at Nassau. Before going to sea he was a member of the corps of the King's Colonials.

Mr. ALBION VILE (Member), elected October, 1898. Mr. Vile died in December, 1909, from hemorrhage of the brain, at the age of sixty-six years. He was well-known in Southampton as chief engineer of the London & South Western Railway Co.'s steamship service for many years. He then became guarantee engineer for Messrs. Oswald & Mordaunt, of Southampton, and while with the firm ran the blockade several times, during the Peruvian War, in the straits of Magellan, on the s.s. *Maran-*

hense. He also brought out designs for a special triple expansion engine, but owing to a breakdown at the yard the negotiations fell through. He afterwards went to Cardiff, where, at the time of his death, he practised as a consulting engineer and surveyor. He patented an improved water gauge glass mounting and protector and packing adjuster, with which many ships in Cardiff and Liverpool are now fitted.

Mr. JESSE WILLIAMS (Companion), elected July, 1909. Mr. Williams was born at Chatham in 1851, served an apprenticeship in Chatham Dockyard, and afterwards served for some years in the shipbuilding department. In 1881 he was appointed Lloyd's Surveyor at Sunderland, transferred in 1890 to Middlesbrough, and promoted to Principal Surveyor of that district in 1892. In January 1904 he became Principal Outdoor Surveyor in London. Mr. Williams was greatly respected, both on account of his practical skill and wide experience, and of his genial nature and good social qualities. His death was unexpected, he having been engaged actively in his duties up to a few hours before passing away.

Mr. JOHN WILLIAMS (Assoc. Member), elected August, 1900. Mr. Williams served his apprenticeship with the Taff Vale Co. and was for many years head foreman shipwright at the Barry Graving Dock.

Mr. HENRY D. WILSON (Member), elected May, 1901. Mr. Wilson died in June, 1909, at the age of fifty-one years, and at the time of his death was works manager for Messrs. Mordey, Carney & Co's. Barry works, which position he had held since 1897. Before being appointed to that position he had sailed as chief engineer in Cardiff-owned steamers for a period of sixteen years. He served his apprenticeship with the North Eastern Marine Engineering Co. at Sunderland.

ADVERTISEMENTS.

The revenue derived from advertisements which are inserted in the proceedings has greatly assisted to cover the expense of the monthly issue, and arrangements are being made by the firm in charge of this section to revise their prices to meet the opinions of several prospective advertisers with a view to enlarge the number of revenue-bearing pages.

ADVISORY COMMITTEE, BOARD OF TRADE.

(Mr. Geo. Shearer, Representative).

The Advisory Committee, whose term of office expired on June 31, was reinstated, and Mr. George Shearer was re-appointed to represent the Institute. Mr. Shearer reports that the following subjects have been considered by the Committee since September 24, 1908 :—

Oil Engines.—The new regulations regarding the qualifications for engineers were settled about January, 1909.

Ventilation of Engine Rooms and Stokeholds.—This matter is now settled and a circular letter on the subject is being addressed to Associations of Shipowners and Shipbuilders and to the various classification societies in accordance with the Committee's recommendations.

Ships' Provisions.—The question of condensed milk v. milk powder was considered, but as the powder is only in the experimental stage it was not accepted.

Central Indexed Register of Seamen.—This matter is now under consideration.

Definition of "Efficient Seamen."—This matter was also considered, but the report was not accepted.

The following questions have now been settled :

Vision Tests and Colour Blindness.

Stowage or housing of boats, on passenger, emigrant or large tramp steamers.

Oil Motor Life Boat, one for all passenger or emigrant vessels.

Line Throwing Appliances. Board of Trade.—Full report published as a Parliamentary paper (c.d. 4552).

ARTICLES OF ASSOCIATION AND BY-LAWS.

A few alterations are proposed in the Articles of Association and By-laws ; these proposals were issued at the stipulated time and will be formally moved for the consideration of the members by the proposer and fully explained.

AWARDS.

The Stephen Award in the Associate Member section for a paper on "The Turbine" was gained by Mr. Jas. S. Gander, and in the Associate section for a paper on "Feed Heating" by Mr. W. W. Adamson. By the kindness of Mr. A. Ritchie (Member), an award was made in the Graduate section for a

paper on "The Functions of the Air and Circulating Pumps," and was gained by Mr. Walter Smith. The subjects of these papers were set by the Committee, who also framed the rules under which the competition took place, the writers adopting each their own *nom de plume*. It is proposed that similar arrangements be carried out for these sections during next ensuing year. The subjects will be announced in the notices of our April issue. The papers which gained awards have been published in the proceedings.

BOHEMIAN CONCERTS.

These pleasant and social "At Homes" were held on Friday evenings, February 12, March 12, November 19, December 10, and January 14, 1910, and formed agreeable interludes during the session. The music and refreshments were provided as usual by those who volunteered to take charge of the proceedings for the evenings named, as per the syllabus of events.

CITY PREMISES.

(Mr. J. T. Milton, Convener).

The City Premises Committee are unanimous in considering that the best interests of the Institute will be furthered by transferring the Headquarters of the Institute from Stratford to London as soon as financial considerations will permit. They, however, realize that the funds and income of the Institute will not at present admit of steps being taken in this direction without outside assistance. The Committee are therefore of opinion that a Special Fund should be started for the purpose of acquiring City Premises and that when this fund has reached an amount which may be deemed sufficient, steps be then taken to acquire Premises suitable for the Institute's work. This Fund should be called the "City Premises Fund" and a separate account should be kept at the Bank to which all subscriptions are to be credited and all matters connected with the Fund should be kept entirely distinct from the general accounts of the Institute.

The Committee further recommend that a strong and influential Committee be formed which shall have power to draw up and issue a request for the co-operation of the Members of the Institute and of all interested in Shipbuilding and Marine Engineering.

EDUCATION AND EXPERIENCE.

A communication was received from a provincial Education Board in which it was proposed to grant provisional second class Board of Trade certificates to engineers on examination previous to entering for training in the engine room at sea, this certificate being exchanged for a complete second class certificate without further examination on the expiry of twelve months' sea service. The obvious objections to this course of procedure were pointed out to the Authority in question, copies of papers Nos. 43, 48 and 77 of the Institute's Transactions, bearing on the subject, being also forwarded.

EXHIBITIONS DURING 1910.

An Exhibition is to be held at Shepherd's Bush from May to October, where Japan is to be strongly represented in a manner which justifies the expectations of the promoters that it will be a most interesting and profitable sight both for general visitors and engineers. It is proposed to arrange for papers to be read on occasional days, of which due notice will be given when the arrangements are completed. Another is to be held at Olympia in September, entitled The Naval, Mercantile Marine and Engineering Exhibition, which is also expected to be of considerable interest and at which it is proposed to have papers read. The Institute is represented on the Committees of both Exhibitions.

EXPERIMENTAL DEPARTMENT.

(Messrs. K. C. Bales and J. Clark, Conveners).

Fuel tests have been conducted on occasional evenings during the year to meet requisitions from members. The conveners are willing to respond to any wish expressed by a member either to witness a fuel test or have special samples tested for comparison.

JUNIOR SECTION.

(Messrs J. G. Hawthorn and J. Lang, R.N.R., Conveners).

Owing to technical classes, which the juniors are encouraged to attend, it is difficult to organize this section in a thorough and systematic way; but the number of regular attenders is increasing, and material is forming for an extended develop-

ment of this section. An excellent gathering assembled on the last night of the year (Hogmanay), on the invitation of the Conveners, and spent a pleasant time with music and dancing, seeing the New Year arrive in good style.

LAWN TENNIS CLUB.

(Mr. J. H. Redman, Hon. Secretary).

The membership of the Club for the past session was seventeen ladies and seventeen gentlemen. As a result of the tournament, (gentlemen's singles), Mr. W. E. Farenden was awarded the prize in the form of a racket, kindly presented to the winner by Mr. Wm. I. Taylor (Member of Council). An outing to Herongate was held in July, when the great majority of the members were present, a very enjoyable day being spent. Two social evenings were also held and a Bohemian Concert was given to members of the Institute and friends on the invitation of the Club. Mr. Alf. Robertson was Captain for the season. The following is a statement of income and expenditure for the season:—

INCOME.			EXPENDITURE.		
	£	s. d.		£	s. d.
Brought Forward	2	2 4½	Laying New Turf	1	2 6
32 Subscriptions, 5 at 10s. 6d.; 27 at 7s. 6d.	12	15 0	Cutting and Rolling Grass	3	4 0
8 Entrance Fees at 2s. 6d.	1	0 0	General Expenses	5	9 2
Bohemian Concert	0	10 0	Postage and Stationery	0	12 10
Socials	23	17 0	Outing	2	11 7
Outing	2	10 0	Concert	1	17 9½
Sundries	0	5 6	Socials	25	11 6
			Gratuities to Caretaker	1	5 0
			Cash, Balance in Hand	1	5 6
	<u>£42</u>	<u>19 10½</u>		<u>£42</u>	<u>19 10½</u>

LIBRARY.

(Mr. J. F. Redman, Convener).

The following donations to the Library have been received from members during the session:—

	£	s. d.
J. Meldrum, Huntly	0	16 0
D. MacLean, Singapore	1	1 0
F. G. Taphouse, London	1	1 0
G. A. Laing, Dundee	2	2 0
John Stewart, Durban	1	1 0
M. Ritson, Genoa	1	0 0
W. H. Trotman, Fremantle	0	14 6
H. J. Pratt, Sydney	5	5 0

A total of £13 0s. 6d. Of this sum £1 16s. has been expended in the purchase of books; the balance being reserved until more accommodation has been provided, the bookcases now being filled to their utmost capacity. In addition to the above donations in money, Mr. Chas. Williams (Member) presented four bound volumes and sixty unbound volumes of the Transactions, Institution of Mechanical Engineers; Mr. Ernest Pull, R.N.R. (Member), *Practical Mechanics' Pocket Guide*, by Robt. Wallace, A.M.; Mr. Jas. Dalziel (Member), *High Life in the Far East*, of which he is the author; Mr. F. M. Timpson (Member), *Steam and its Uses*, by Dr. Lardner; Mr. Geo. W. Black (Member), sixteen volumes of Lloyd's *Register of Shipping* (1836-1863); Mr. John C. Black, *Electric Ship Lighting*, by Urquhart and Mr. W. Kerr, *Machines Alternatives* by Joach and Masméjean. Other additions to the Library will be found in the list given on succeeding pages. The Council take this opportunity of again expressing their thanks to all members and friends who have made these donations, both in money and in books.

During the session a departure has been made in leaving the bookcase unlocked for the purpose of giving the members free access to the books, and that this has been appreciated is evidenced by the more extended use of the books for casual reference. It is hoped that arrangements will shortly be made whereby more space will be available for the disposal of the books.

LLOYD'S REGISTER SCHOLARSHIP.

This was gained, as the result of examinations held in Newcastle and Glasgow simultaneously, by Mr. Frank Duncanson (Graduate), and he is now attending classes in connexion with the Imperial Institute. Mr. Duncanson also gained a Whitworth Exhibition and a National Scholarship subsequently. Mr. Thomson (Graduate), who gained the Lloyd's Register Scholarship in the previous year, is continuing his studies at Glasgow University.

PAPERS AND LECTURES.

(Mr. A. E. Battle, Convener).

The following papers and lectures were given during the session:—
1909.

Feb. 1. Smoke Prevention and Fuel Economics. By Mr. J. R. M. Fitch (Member).

- Feb. 15. Some Details of a Cargo Steamer. By Mr. W. Veysey Lang (Member).
- Mar. 1. Efficient Circulation of Water in Steam Boilers. By Mr. Arthur Rose, F.I.C., F.C.S. (Companion).
- Mar. 8. The Application of Alternating Currents of Electricity to Modern Steamship Requirements. By Mr. John McLaren (Member of Council).
- Mar. 28. The Characteristics of Copper under Various Conditions. By Mr. G. W. Handscomb.
- July 24. Read at the Exhibition, Shepherd's Bush, W. Refrigerating Installations, with special reference to the arrangements necessary when narrow limits of temperature are required. By Mr. Robt. Balfour (Member).
- Sept. 4. Read at the Exhibition, Shepherd's Bush, W. The Extended Uses of Electricity on Board Ship. By Mr. John McLaren (Member of Council).
- Sept. 4. Read at the Exhibition, Shepherd's Bush, W. The Treatment of Marine Boilers on Long Voyages. By Mr. H. Ruck-Keene (Member).
- Sept. 27. Hydraulic Cargo Gear for Passenger Ships. By Mr. A. M. McAlister (Member).
- Sept. 27. Water Hammer. By Mr. Bishop N. King (Member).
- Nov. 1. Experiences with Boiler Scale. By Mr. Wm. Henderson (Member).
- Nov. 15. Marine Engines and Superheated Steam. By Mr. A. F. White (Member).
- Nov. 22. Notes on Boiler Covering. By Mr. A. P. Strohmer, F.I.C.
- Dec. 6. The Engine-Room Telegraph. By Mr. J. M. Newall (Member). 1910.
- Jan. 17. Cylinder Losses and the Adiabatic Expansion of Steam with and without Superheat. By Mr. J. Clark (Member).
- Jan. 31. The Care of Ships' Electric Installations. By Mr. T. R. Stuart (Member).

It will be seen from the above that the past session has been very prolific in meetings for the reading of papers and lectures on subjects of a character in keeping with the advancement of marine engineering, and with the necessity laid upon marine engineers of becoming acquainted with possible changes before these take effect. The dissemination of these lectures and papers, with the accompanying reports of discussions, which add very much to their value, cannot fail to be of the greatest benefit to members both at home and abroad in keeping them acquainted with the latest developments of modern practice.

The papers on the syllabus for the coming session are in keeping with the foregoing both in view of their up-to-date character and their practical bearing. They are as follows :—

The Application of Oxy-Acetylene Welding to the Repair of Marine Boilers and Hulls. By Mr. Leonard M. Fox (Member).

Electro-Magnetic Transmission of Power for Marine Propulsion. By Mr. Jules Lecoche (Member).

Improved Electrical Apparatus for warping, winding, hoisting, etc., on board ship. By Mr. Jas. A. Liddle, F.R.S.A.
The Stability of Ships. By Mr. Edwin Tate.

In addition to these it is proposed that papers on the subject of the Internal Combustion Engine, by Mr. F. J. Kean, B. Sc. (Member), and Mr. W. R. Cummins (Member), shall be read on the occasion of a visit to the Japan-British Exhibition, which it is hoped will be arranged for the month of June, and also that a paper on a similar subject be given by Mr. W. P. Durnall on the occasion of a visit to be arranged to the Naval and Mercantile Engineering Exhibition at Olympia in September.

During the session several short papers have been contributed by members giving records of their experiences, and members are urged to send in short contributions of this character giving information which they think might be of general interest. Two or three of these short papers might be read on the same evening and printed in the same issue of the Transactions.

PRESS CUTTINGS.

(Mr. George Adams, Convener).

These embrace matters of interest culled from the technical or general press and contributions are invited to the collection, which is open for the service of members desiring to gain information on special questions.

PROPERTY.

(Mr. J. H. Silley, Convener).

The building and surroundings have been kept in order and several minor repairs carried out to keep the property in good condition. A few additions have been made to the stock as per list and thanks are accorded to those to whom the Institute is indebted. Some exhibits were lent to the Machinery Section of the Shepherd's Bush Exhibition by the Institute, supplemented by a few from members. These exhibits were insured by the Exhibition authorities and duly returned.

READING ROOM.

(Mr. D. Hulme, Convener).

A list of periodicals purchased and presented for the Reading Room table is given on a succeeding page. It will be observed that the list covers a large assortment for the benefit of visitors.

RECREATION AND ANNUAL DINNER.

(Messrs. A. H. Mather and J. McLaren, Conveners).

(Mr. W. I. Taylor, Convener).

The Annual Dinner was held in the King's Hall, Holborn Restaurant, on Wednesday, November 3, 1909, presided over by the Past President, Jas. Denny, Esq. The full report was published in the December issue of the Transactions.

The Annual Ball was held in the Abercorn Rooms, Liverpool Street Hotel, on Friday, January 21. The attendance was not up to the expectations of the Committee.

SANITARY INSTITUTE.

The Congress in connexion with the Sanitary Institute is to be held at Brighton from September 5 to 10, 1910, and the Institute has been invited to appoint a representative to attend. This will receive the consideration of the Council.

TRANSACTIONS.

(Mr. J. E. Elmslie, Convener).

The various proceedings at the meetings have been published in monthly parts as during recent years, this arrangement having given general satisfaction to members. The back of the cover has proved a convenient means of keeping members informed as to papers to be read, notices as to visits to works, and social functions, alterations in or additions to the sessional programme, etc.

The list of papers and lectures which appeared in the last Annual Report was reprinted in pamphlet form and circulated among new members with the result that the number of copies sold is 177, as against 45 last session. 86 volumes of the Transactions were bound, and of these 22 were sold to members, 30 were presented to kindred institutions, societies, colleges, etc., the remaining 14 being still in stock. Members can obtain back numbers of papers at 6*d.* per copy. Members are again reminded to notify changes of address or to forward the addresses of members noted as wanted in the registered list. The Council have taken steps to keep the printing account as low as possible, consistent with retaining the leading points in the discussions as nearly as may be in the terms of expression used by members.

VISITS TO WORKS.

The following visits were arranged on Saturday afternoons during the session :—

- April 25. Messrs. Capel & Co., Ltd., Engineers, Dalston, N.E.
- May 15. The National Physical Laboratory, Teddington.
- June 19. Trinity House, Tower Hill, E.C.
- July 10. Messrs. Doulton & Co., Lambeth.
- July 25. Imperial International Exhibition, Shepherd's Bush.
- September 4. Imperial International Exhibition.
- December 4. Trip on demonstration vessel driven by reversible oil engine, by kind invitation of Messrs. The Diesel Oil Engine Co., Ltd.
- December 11. Trip on demonstration vessel *Bolinders VII*, driven by reversible oil engine, by kind invitation of Messrs. Jas. Pollock, Sons & Co. Ltd.

Reports of these visits were duly recorded in the Transactions. On the occasion of the visit to the National Physical Laboratory the presentation of the Gold Emblem of New Zealand was made to the Hon. Secretary by the High Commissioner of New Zealand, the Hon. Wm. Hall-Jones. A large number of members and friends were present, including some twenty young New Zealanders. This event and the letter which advised the despatch of the emblem from the marine engineers of the Dominion have proved that the influence and interest of the Institute have been recognized in Australasia. Mr. R. Hislop, Secretary of the New Zealand branch of the Australasian Institute of Marine Engineers, was elected an Hon. Companion of the Institute in order to form a closer link of reciprocal attachment between the Associations. A fine building has been erected at Wellington, New Zealand, with good accommodation for carrying on the work, and our members are invited to visit the premises in the event of calling at that port. Reciprocal invitations are also extended to members of the Institute of Marine Engineers, and of the Australasian Institute of Marine Engineers, to visit any of the premises of the corresponding societies or centres thereof.

At the Imperial International Exhibition papers were read by Mr. Robt. Balfour (Member) on "Refrigerating Installations, with special reference to the arrangements necessary when narrow limits of temperature are required." Mr. John McLaren (Member of Council) on "The Extended Uses of Electricity on Board Ship," and by Mr. H. Ruck-Keene (Member) on "The Treatment of Marine Boilers on Long Voyages."

Arrangements are being made for visits to works during the forthcoming summer session, and these will be advertised on the back cover of the Transactions. The attention of members is specially directed to this medium of communication for the arrangements announced month by month.

The coming session is looked forward to with the desire, and in the hope, that progress may be the watchword in all the departments of the Institute's work. To realize this the hearty co-operation of every member is evoked, that the attendance at the various meetings may be improved, the discussions made more profitable, suggestions communicated with a view to additions or improvements in any of the departments for the greater convenience of members, or the general advancement of the Institute.

The following are the subjects of examination in connection with the Lloyd's Register Scholarship :—

- (a) Algebra, including Quadratics.
- (b) Elements of Statics, Dynamics, Thermodynamics, and Hydrostatics.
- (c) Euclid, Books I., II., III and IV.
- (d) General Knowledge, English Grammar and Composition.
- (e) Mechanics, Principles and Problems.
- (f) Language, French or German, Construction and Translation.
- (g) Plane Trigonometry, including Logarithms.
- (h) Practical Engineering and Workshop practice.

On behalf of the Council,

JAS. ADAMSON,

Hon. Secretary.

CHAIRMAN : I will now call upon Mr. Mather to submit the Revenue Account and Balance Sheet.

REVENUE

Dr.

1st February, 1909, to

	£ s. d.	£ s. d.
To General Expenses :		
Bank Charges	0 15 11	
Postages, etc.	42 1 0 $\frac{1}{2}$	
Telegraphic Address .. .	1 1 0	
Inscription on Medal .. .	0 7 6	
Engrossing Certificate .. .	2 2 0	
Stationery and General Printing .. .	34 2 7	
Assistant Secretary's Salary .. .	164 11 8	
Chartered Accountants' Fees .. .	10 10 0	
Telephone	8 12 8	
Exhibition Expenses. (Cost of Meeting held at Imperial International Exhibition, in- cluding cost of preparing Models and Pic- tures for Exhibition) .. .	6 10 10	
Kindred Associations' Representatives' Expenses	2 5 3	
	273 0 5 $\frac{1}{2}$	
„ Rates and Taxes, etc. :		
Rates and Taxes	31 2 8	
Gas and Electricity	14 8 6	
Water	3 5 2	
	48 16 4	
„ House Account :		
Caretaker	69 14 0	
Coals	7 4 0	
Sundries	4 6 2 $\frac{1}{2}$	
	81 4 2 $\frac{1}{2}$	
„ Insurance	3 15 0	
„ Repairs, Additions and Alterations .. .	48 11 0	
„ Depreciation, Furniture, etc., at Institute .. .	15 11 5	
„ Reading Room Expenses	15 9 10 $\frac{1}{2}$	
„ Papers and Discussions :		
Printing and Postages	405 11 11 $\frac{1}{2}$	
Hire of Lecture Halls	3 3 0	
	408 14 11 $\frac{1}{2}$	
„ Interest :		
Denny Gold Medal Fund	10 0 0	
Stephens' Legacy	2 10 0	
	12 10 0	
„ Recreation Section :		
Expenses of Dinner	148 10 4	
„ „ Annual Ball	64 1 10	
	212 12 2	
Expenses of Annual Meeting	11 3 5 $\frac{1}{2}$	
Expenses of Tennis Club	0 13 0	
„ Transaction Section	20 7 1	
„ Experimental Department Expenses .. .	0 4 2	
„ Lloyd's Register Scholarship Account Expenses	8 18 2 $\frac{1}{2}$	
„ Ritchie Award Expenses	2 0 0	
„ Balance	106 16 9	
	£1,270 8 1	

ACCOUNT.

31st January, 1910.

Cr.

		£	s.	d.	£	s.	d.
By Subscriptions :							
Members		901	1	4			
Associate Members .. .		37	19	5			
Associates .. .		19	12	6			
Graduates .. .		7	10	10			
Companions .. .		56	12	3			
		<hr/>					
		£1,022	16	4			
„ Less Subscriptions in Advance—							
Members .. .	£90	19	5				
Associate Members .. .		2	1	3			
Associates .. .		0	9	2			
Graduates .. .		0	13	9			
Companions .. .		6	13	2			
		<hr/>					
		100	16	9			
					921	19	7
„ Interest :							
Consols .. .		16	13	3			
Transvaal Stock .. .		5	13	0			
Local Loans .. .		14	3	3			
Deposit .. .		1	12	1			
		<hr/>					
					38	1	7
„ Recreation Section :							
Sale of Ball Tickets .. .		59	6	6			
„ „ Dinner Tickets .. .	124	16	6				
Donation, Mr. Robert Clark .. .	1	1	0				
		<hr/>					
		125	17	6			
					185	4	0
„ Donations to Library .. .					11	4	6
„ Donation, Mr. W. T. Dumbell .. .					2	0	0
„ Donation Mr. Archd. Ritchie (Ritchie Award) .. .					2	0	0
„ Transactions Section .. .					27	9	10
„ Advertisements .. .					79	9	0
„ General Revenue :							
National Telephone .. .		0	6	1			
Sundries .. .		0	10	0			
Billiard Table Receipts .. .		2	3	6			
		<hr/>					
					2	19	7

 £1,270 8 1

THE INSTITUTE OF MARINE ENGINEERS.

Dr.

BALANCE SHEET, 31st JANUARY, 1910.

Cr.

LIABILITIES.				ASSETS.			
				By Cash—			
				At Bank			
				On Deposit			
				In Hand			
				Sundry Debtors for Ball Tickets, etc. ..			
				Investments—			
				£968 13s. 6d. Consols 2½% ..			
				£200 Transvaal 3% Stock ..			
				£500 Local Loans 3% ..			
				Freehold of Institute Buildings ..			
				Furniture at Institute—			
				Balance, 1st February, 1909 ..			
				Additions			
				Less Depreciation			
				Rates and Taxes in advance, estimated ..			
To Sundry Creditors		£	s. d.			£	s. d.
„ Subscriptions in Advance			54 8 9			215 2 7	
„ Denny Gold Medal Fund			100 16 9			100 0 0	
„ Stephens' Legacy Fund—			261 13 4			2 13 4	
Balance, 1st February, 1909 ..	114	12	6			317 15 11	
Add Interest		2	10 0			19 1 7	
			117 2 6				
Less Awards		4	7 2				
			112 15 4			1,512 10 6	
„ Revenue Account—						1,500 0 0	
Balance, 1st February, 1909 ..	2,771	4	2				
Add Balance of Revenue Account	106	16	9				
Add Entrance Fees for year ..	242	0	11				
			3,120 1 10				
			£3,649 16 0			£3,649 16 0	

Mr. A. H. MATHER (Hon. Treasurer): Mr. Chairman and gentlemen, I have a much more pleasant task this evening than on a similar occasion last year. Last year we were in rather an unfortunate position as regards the finances, not a serious one, but one we do not like to see. This year we are upon a different footing, and the best way in which I can put the position before you is in the words of the chartered accountants, who examined the books and who give, in their report, the special features to be emphasized.

95, CANNON STREET,
LONDON, E.C.
14th March, 1910.

To the Members of

THE INSTITUTE OF MARINE ENGINEERS,
58, ROMFORD ROAD, STRATFORD, E.

GENTLEMEN,—

We have to report that we have examined and checked the Accounts of your Institute for the year ended 31st January, 1910.

The Revenue Account shews a Profit of £106 16s. 9d. as compared with a Loss last year of £41 5s. 11d., being a difference of £148 2s. 8d., which is mainly accounted for by the following items:—

Subscriptions have increased by £128 18s. 2d., more than making up for last year's decrease of £115 3s. 3d.

Papers and Discussions have cost £67 18s. 10d. less as compared with an increase last year of £118 3s. 11d.

On the other hand the Revenue from Advertisements has decreased by £22 17s. 6d. and the cost of Repairs, Additions, and Alterations has increased by £37 3s. 7d.

The remainder of the difference is accounted for by various small increases and decreases the chief of which is an increase of £18 12s. 7d. in General Expenses.

We have obtained all the information and explanations we have required. In our opinion the Balance Sheet of your Institute has been properly drawn up so as to exhibit a true and correct view of the state of the Institute's affairs according to the best of our information and the explanations given us and as shewn by the books of the Institute.

We have inspected the Title Deeds of the Freehold Property and have verified the Investments and the Balances at the Bank.

We are, Gentlemen,

Yours truly,

WEST AND DRAKE,

Chartered Accountants.

This report on the year's working, I think you will agree, is very satisfactory indeed, and an examination of the Balance Sheet and Revenue Account will show that all parts of the work of the Institute are being carried on in a good and sound manner financially. The additions to the Capital Account this year amount to a very considerable figure. We have had a large increase of membership and, as you know, all entrance fees go direct to the capital account of the Institute. That has resulted in an increase of £348 17s. 8d. You will also note that the investments have been increased during the year. The amount lying on deposit had risen, at the beginning of last session, to a considerable sum, and it was deemed advisable to put the money to better use. It was therefore invested in the purchase of £350 worth of Consols at $2\frac{1}{2}$ per cent., which brings the total amount of investments to the sum of £1,512 10s. 0d. That, of course, is in addition to the value of our freehold premises, so that the property of the Institute is increasing and that without starving the work in any way. There is one little matter in the Annual Report which might be mentioned in connexion with this. On referring to the report it will be found that it says "several minor repairs have been carried out." There is one repair which might hardly be called minor, and that is in connexion with the boundary wall of the Institute. That wall got into rather bad condition, and £36 had to be expended to put it into a safe condition by the addition of buttresses inside. The Recreation Section, I am pleased to say, although a little on the wrong side, is not nearly so far behind as in previous years. I think those are the principal features to be taken notice of, and I hope they meet with the approbation of the members.

Mr. W. E. FARENDE: There are one or two little items in connexion with the financial statement that I should like to ask the Hon. Treasurer about. There is one item in the Revenue Account of £11 3s 5½d. for expenses in connexion with the Annual Meeting. I should like to know how that is made up, and whether it includes the expenses for printing. Another item I should like to comment upon is the £19 17s., "Sundry debtors for Ball tickets, etc." The Ball was not successful financially, and if this money were got in we should not have to deplore the loss on the Ball.

Mr. MATHER : With regard to the expense of the Annual Meeting, this, of course, includes the printing of Annual Meeting circulars, ballot papers and envelopes, and the postages to all the members, in addition to the small amount for refreshments. This is an item which appears every year, but there is an increase of about £5 over last year's corresponding item, and I should like to explain how that has occurred. In the first place there is the additional cost of printing the "Alterations to By-laws" circular, which accounts for about 35s.; another 36s. is accounted for by the fact that photographs of the Annual Meeting of 1908, held in the *Hotel Cecil* on the invitation of Lord Pirrie, were sold last session, reducing the amount of Annual Meeting expenses for that session by that amount. The remainder is almost entirely made up by circumstances attending the growth of the Institute, such as additional expenses for printing and postages consequent upon the increased membership. With regard to the amount outstanding for Ball tickets, the item is not a loss in any sense, and a similar amount will be found in last year's revenue account. The reason for it being shown is because the Annual Ball comes so near the end of the financial year that it is quite impossible to get all the money in before that time so that it has to be carried forward in this way to the succeeding year's accounts. As a matter of fact the whole of the money has been received since the books were closed for the session.

Mr. ROBT. BALFOUR (Member) : I have very much pleasure in proposing the adoption of the Annual Report and Financial Statement which have just been submitted. You will all agree that they have been drawn up in a very clear and comprehensive manner, and I think they will be generally considered by the members as highly satisfactory in every respect. They also go to show that the office-bearers and members of Council have performed their duties well and at considerable personal inconvenience. It is very gratifying to know that the membership has been considerably increased during last year, but I should also take this opportunity of saying, and I believe it will be endorsed, that a large accession of members is not always a sign of strength, and I would therefore call particular attention to the Articles of Association, page 18, where members agree to contribute to the success of the Institute, individually

and collectively, either by means of giving papers, or by being present at the meetings or taking part in the discussions. The obituary list, we all regret to see, is a long one, but that is a matter beyond our control. It includes the name of our late esteemed President, Mr. James Dixon, who, we know, took a very keen interest in the affairs of the Institute, and showed that in a very practical form by being the prime mover in the founding of the Lloyd's Register Scholarships. It is pleasing to know that the Board of Trade have shown their appreciation of, and confidence in, our Representative who has been acting on the Advisory Committee in connexion with the Merchant Shipping Act, and that the Council have thought fit to re-appoint him in that capacity. With regard to the question of City Premises, I have not had much time to think over it. It has been put very clearly before you, and now is the opportunity for members to express their views on the subject, the greatest opportunity, in fact, that they have during the year. The papers and lectures appear to have given great satisfaction, and, as stated in the report, must have been of especial benefit to those abroad or at sea. As to the condition of the Institute generally, that subject requires very few words from me. At the early part of last year I was pleased to be present at the National Physical Laboratory, when the Hon. Wm. Hall-Jones, High Commissioner for New Zealand, honoured the Institute through our Honorary Secretary, by decorating him with the Gold Emblem of the Marine Engineers of the Dominion, which speaks volumes to show that the influence of the Institute is wide-spread. As to the Financial Statement I may say that there is no need whatever for me to comment upon it, but simply to refer you to the report of the chartered accountants and to congratulate the Institute on the sound financial position in which we stand. I have, therefore, much pleasure in moving the adoption of the Reports.

MR. JAS. TURNER (Member) : It is my privilege to undertake this evening the orthodox and to me very gratifying duty of seconding the adoption of the Reports, and as one who has come from a frontier out in the East I feel that I am particularly favoured. We have had our hand on the pulse of the Institute this evening, and we feel the life vigorous and strong, a thing upon which the members of the executive are to be congratulated. It is only necessary to look through the various points

touched upon in this report to see what a large number of varied interests are referred to and the amount of sacrifice in which the executive are involved in carrying on the work of an Institute of this description. The chief feature to be gathered from the report, as far as I can see, is that this Institute stands for progress ; it recognizes the fact that we are not prepared to stand still. Another thing that I note particularly about it is that this tendency to advance is not stimulated from without, but comes from within, which is a hopeful sign of future progress. To-day I have had an opportunity of walking through the Institute and noting the various specimens and apparatus that you have here, and I was particularly struck by the value of these things as being a form of mental stimulus, particularly to the younger members. They open to our minds new fields for thought, new ideas, new applications, new methods, and consequently give us a greater advantage in meeting with the various and peculiar difficulties we have to meet as engineers. Looking at the question from this tangent, I feel very grateful, in the first place, that I am able to be a member and enjoy the fruit of the brains of the various people who come here and instruct us. There is one thing I might mention. There seems to be one side of engineering that possibly may be considered more, and that is the commercial side, the commercial value of the various subjects put before us. Marine engineers find their way to all parts of the world, and it may be to their advantage to leave the sea. Afterwards they may have to deal with very hard and matter-of-fact people in commerce, when the financial aspect is a very important one, and I was wondering if anything could be done which would throw a light on the commercial value of the ideas proposed and the subjects brought forward. I have very great pleasure in seconding the adoption of the reports.

The motion was put to the meeting, and carried *nem. con.*

Mr. J. T. MILTON : It is my duty to-night to propose to you the adoption of some alterations to the By-laws and Articles of Association of the Institute. Those who were at the Annual Meeting last year will remember that some of the members thought it was possible to make improvements in the method of electing our Members of Council. There was a view expressed that some of the Members of Council had been too long on the Council, and it would be an advantage to have

“fresh blood” in it. The Council very carefully considered the matter and certain suggested modifications are embodied in a circular sent to each Member of the Institute three months ago. The main result of these alterations will be that the Council will remain as at present so far as numbers are concerned, but that after a Member of Council has served for three years he shall retire and not be eligible for re-election for one year. That will mean that a certain number of new members must be elected to the Council each year. As a matter of fact that system is being very successfully adopted in other institutions, and it is from the successful operation of the system in those institutions that the Council recommend we should adopt it. One of the points connected with the matter is a small one, perhaps, but it is desirable that you should have it pointed out particularly. In the present Council an Honorary Minute Secretary, an Honorary Financial Secretary and thirteen ordinary Members of Council are elected. It is proposed to have fifteen ordinary Members of Council, who will select from amongst their own number an Honorary Minute Secretary and an Honorary Financial Secretary. With regard to these proposals, the fact that our Institute is incorporated necessitates our By-laws being sent to the Board of Trade for approval, and the Board of Trade have pointed out that in the proposals that are being put before you, we propose in the future that the President, Honorary Treasurer and Honorary Secretary shall be elected by the Council and not by the general members. I hope you will agree that it is necessary that each of these selections should be from the Council. It is absolutely necessary that the President should be elected by those who know best the duties that are to be fulfilled and his election should be unanimous to carry weight; it is very essential, as far as the President is concerned, that we should be united. With regard to the Honorary Secretary and Honorary Treasurer we in the Council feel that it is a very essential thing that the work of these offices should be continuous, and whereas ordinary Members of Council will, if you approve of the new By-laws, go out of office after three years' service, it is very undesirable that either of these two office-bearers should retire at the end of a stated period if they are willing to go on with the work, as it is work that can only be done well by those conversant with it. The Board of Trade, therefore, have suggested a modification of one of these articles we have put before you

and the members of the Institute and the words in the proposed new By-law 25 :

“ This ballot paper must contain the names of a proposed President, Honorary Secretary and Honorary Treasurer proposed by the Council ”

they say should be put as a separate sentence :

“ The President, Honorary Secretary and Honorary Treasurer shall be elected by the Council.”

This is exactly what was meant, but it is put in a more direct way.

With these remarks I propose that the general meeting signify their approval of the proposed alterations in the By-laws and Articles of Association.

Mr. JOSEPH HALLETT : I do not think it is necessary for me to elaborate what Mr. Milton has already said. He has placed the matter very clearly before you with regard to the meaning of the proposed alterations to the By-laws, but I would strongly urge upon you the adoption of these alterations and particularly the one which provides for the introduction of new blood into the Council. By that means you will avoid one of the most pernicious effects of Councils of long standing, the tendency to fall into a groove, which, with the very best intentions, Councils frequently do. With regard to the other By-law to be amended, referred to by Mr. Milton, conferring the power on the Council of electing the President, Honorary Secretary and Honorary Treasurer, I think that is a very proper thing to do. Your Council is a thoroughly representative body and is exactly in the same position as a board of directors, and to them you should give the full powers of managing the concern in the best interests of the Institute. They are in a better position than individual members to decide who those three officers should be, and I recommend that they be entrusted with that power. I have pleasure in seconding Mr. Milton's proposal.

Mr. W. E. FARENDEN (Member) : I beg to move an amendment to one or two of these proposed alterations to the By-laws and Articles of Association. With regard to the proposed new Article 35, I should suggest that the words “ Not less than ” be left out so that the clause would then read “ Five ordinary Members of Council who have been longest in office shall

retire, etc.” I think we should make it a definite number. With regard to By-law 25, this By-law as it now stands enables any member, in a space allotted on the ballot paper, to put down the name of any member or honorary member instead of any other nominated by the Council for all positions on the Council, from the President down, and the amendment takes away this power with regard to the positions of President, Honorary Secretary and Honorary Treasurer. I am surprised at this suggestion, and I fail to see why this power should be taken from the members of substituting any name for that proposed by the Council. The By-law goes on to say “any member who is entitled to vote may nominate any member or honorary member for election as ordinary Member of Council, provided such nomination is made in writing to the Council at least four calendar months before the Annual General Meeting,” but they are to have no voice in nominating a President, Honorary Secretary or Honorary Treasurer, and I do not think that is quite fair to the members of the Institute. With regard to the position of President, I feel inclined to give way, because I think we should always have a gentleman in that position who is well known in the engineering world, and we could in this case rely on the Council’s selection, but with regard to the Honorary Treasurer and Honorary Secretary, I think their election ought to remain as at present. I do not know whether the Council have had any complaints from the members in connexion with the matter. With regard to By-law No. 27, I do not agree with the rule that the ballot paper should be void if members fill in less names than there are vacancies to be filled. It may be that a member out in foreign countries does not know all those whose names are proposed and only votes for those he knows something about, and because a member does not vote for those he knows nothing about is no reason, in my opinion, why his vote should be disqualified. I am decidedly opposed to that alteration. Again, with regard to the last proposal, I think this opposed the one previously mentioned which states that the Council should elect an Honorary Secretary and Honorary Treasurer while it is proposed in this altered By-law that the members at the Annual Meeting shall fill these two offices.

Mr. F. M. TIMPSON (Member): I rise to second Mr. Farenden’s amendment. I do not think it would be very good

procedure to adopt the policy of the public companies, because we see this sometimes result in dissension between the directors and the members. I think the members should reserve the right of approving the election of the President, and electing the Honorary Secretary and Honorary Treasurer. With regard to the ballot papers, I do not see why the papers should not contain less names than there are vacancies to be filled, because many members only vote for those whom they know. I think it would be a mistake to alter that point.

CHAIRMAN : Before the matter is discussed further perhaps Mr. Milton might say if he has any objection to the amendments proposed. Perhaps he might explain the proposed new Article 35 if he wishes it to be more specific.

Mr. MILTON : With regard to that one, I think the gentlemen who have spoken have not quite realized why the words "not less than five" are used. If all the members of Council are alive at the end of the session only five ordinary members would be required to fill the places of those retiring; but such things happen as persons dying and some year six or more might have to be elected, otherwise some would remain in office longer and those words were put in to make a three years term of office only possible. With regard to the other question it is a matter for the members to decide. The matter is put fairly before you, and personally I cannot take any exception if members differ from me and others of the Council in opinion. We think it desirable that the offices of Honorary Secretary and Honorary Treasurer should be held continuously if the holders are willing to serve, and the Council are the best judges of how those duties should be carried out rather than the members. However, it is entirely in the hands of the members.

CHAIRMAN : I understood Mr. Farenden to say that he was willing to waive the question of the President being appointed by the Council. The question before the meeting now is with regard to the appointment of the Honorary Secretary and Honorary Treasurer; whether they will be appointed by the members as a whole or by the Council.

Mr. FARENDEEN : Yes, I think the members should have a voice in the matter.

CHAIRMAN : It is for the meeting to decide upon two points. The question of the ballot paper is a trifling one, and the only important point is whether the Honorary Secretary and Honorary Treasurer shall be appointed by the Council or by the whole of the members.

Mr. J. R. RUTHVEN (Member) : I propose that the By-laws shall remain as they are. I think the proposals are most revolutionary and make an entire alteration of the basis of membership. In twenty-one years we have only had one little trouble and that was soon put right. With regard to the Honorary Secretary, he has always been appointed unanimously, and I think it would be a most disastrous thing to take the power of election out of the hands of the members ; once taken away they could not get it back again without a great deal of trouble. The Honorary Treasurer is almost as important ; the membership should have control of finance. With regard to the Honorary Financial Secretary and the Honorary Minute Secretary also I propose that the basis of election remains as it is. With regard to members of Council retiring, if you have a useful member I do not see why he should be sent away for a year. The members at present have it entirely in their own hands to elect whom they like. If they choose to put new blood on the Council they are quite welcome to do so, but to restrict them in their choice is in my opinion a very bad policy.

Mr. R. H. DALTON : Might I suggest that the alterations be discussed separately. With some of them the members may be in agreement while they may not be with others. I take it that the alterations would be allowed to go through if passed.

Mr. W. McLAREN : I think the circular was issued in order that any member might raise objections. This is our general meeting for us either to accept, rescind or alter the proposals put before us, and if they are altered I think the alterations will be allowed.

CHAIRMAN : The idea is that the mind of the meeting should be ascertained, and even if the proposals could not be carried through there would be no harm done ; on the other hand, if the proposed changes were in accordance with the wish of

the meeting matters could be so arranged. The first suggestion of alteration is in relation to Article of Association No. 35. It was agreed by the mover and seconder of the amendment that it might be left as originally proposed in the circular. The next point, and the one really to be decided, is whether the Honorary Secretary and the Honorary Treasurer are to be appointed by the members or by the Council. Those who are for Mr. Farenden's amendment—that is to say, that the election of Honorary Secretary and Honorary Treasurer should be maintained in the hands of the members—will please hold up their hands. Those who are for Mr. Milton's motion, that the appointments should be vested with the Council.

The Chairman declared Mr. Farenden's amendment carried.

Mr. MILTON: The question has been raised as to whether in this case Members of Council should vote.

CHAIRMAN: I do not think you can deprive members of Council of their right to vote, because, after all, members of Council are members of the Institute.

Mr. W. McLAREN: The notice to members disqualifies any motion to that effect: members of Council are ordinary members to-night.

Mr. D. HULME: There was some misunderstanding about the question when the vote was taken.

Mr. A. H. MATHER: The vote was taken quite under a misunderstanding, a number of members of Council were under the impression that they were not to vote on this subject.

Mr. HAWTHORN: We have already discussed this, and the Council agreed to put these proposals before the members.

CHAIRMAN: That is taking something for granted; we do not know that the Council are unanimous. If there was any misunderstanding we had better take the vote again.

The vote was again put to the meeting and the Chairman declared Mr. Farenden's amendment carried by a larger majority.

CHAIRMAN: The only other point to be dealt with is whether the ballot papers are to be filled up in their entirety and if

not filled up are to be void. Perhaps Mr. Milton will say why this change has been suggested.

Mr. J. T. MILTON : It was thought that members who take an interest in the election of officers would all get an opportunity of nominating persons as members of Council, and I suppose it was not contemplated that some of the members would not know those nominated. It is the usual thing for ballot papers to be fully filled up or otherwise to be void. The main object is to prevent what is sometimes felt to be an abuse of "plumping" for one candidate only and so get a partisan on the Council. That is the main object ; it is not a vital matter and it is a point for the members to decide.

CHAIRMAN : Will those who are for the amendment, that this alteration is not to be made, and that if members do not fill up the ballot papers completely the ballot paper shall not be invalidated, please hold up their hands. Now those who are in favour of the change ; that if the ballot papers are not filled up they shall be void.

The Chairman declared the amendment carried.

Mr. MILTON : I should like it to be made perfectly clear at this meeting whether the meeting have accepted the position that the retiring members of Council shall not be eligible for re-election for one year.

CHAIRMAN : The point Mr. Milton would like to be made clear is whether the members of Council who retire shall not be eligible for re-election until they have been one year out of office. One member spoke very strongly on the subject, and I fancy there is much to be said on both sides of the question. I suggest that we should vote upon it.

Mr. FARENDEEN : I am quite in favour of this proposed change in Article No. 35 with regard to a member of Council not being eligible for re-election for one year. I think it is a good suggestion and one that has been wanted for a long time. It gives an opportunity of getting fresh men on the Council, and I am very much in favour of it.

Mr. F. M. TIMPSON : I am in entire agreement with Mr. Farendeen on that question. It will give some of those gentle-

men who want to retire a little rest and not leave all the work to one or two year after year.

Mr. HAWTHORN : The members of the Institute have always had the power to select and elect by their ballot the members of Council whom they wished, but they never took advantage of this power, and it is in order to try and force that opportunity before them that we are bringing in this motion that the five members of Council who retire shall not be eligible for re-election for one year.

Mr. RUTHVEN : I am very much against interfering with the liberties of the membership and preventing them from voting for any one whom they think should be on the Council. Only about one-fifth part of the members vote at the present time and the question should be why cannot we get the members to talk about it and send in their votes.

CHAIRMAN : It is a matter which is certainly very much a matter of opinion. The point is the Council suggest that the retiring members of Council shall not be eligible for re-election for one year from going out of office. The amendment is that the members shall elect any one they like. Is there any seconder to the amendment ?

There was no seconder to the amendment, and the Chairman accordingly declared the meeting to be unanimously in agreement with the proposal.

Mr. J. PRESTON : I am very glad to have an opportunity of carrying out what to me is a very pleasant duty, that of proposing a vote of thanks to Mr. Denny for acting as President of the Institute during the vacancy unhappily caused by the death of Mr. Dixon. Although we may disagree on other matters before us this evening I am assured that there can be no amendment to the proposal I have to make and am sure also that the vote will be unanimously carried. During session 1908-09 Mr. Denny carried out the duties of President of the Institute in the strenuous manner and with the thoroughness one always finds in the firm of Denny Brothers. He seems to have a large amount of surplus energy, and if we can get that energy directed to the service of the Institute the Institute will be the better for it. Mr. Dixon, unfortunately and to our great sorrow, died a few months after

his election as President for session 1909-10, and the Council thought it was not advisable to elect a successor for a part of the session. They therefore approached Mr. Denny, who kindly consented to fill the position, which he has done with the unflinching tact, courtesy and ability characteristic of him, although his home is so far away from the Institute. I live at the other side of London and do not attend as often as Mr. Denny, which, of course, is a point against me, although at the same time it indicates the conscientious way in which Mr. Denny has carried out the duties of the position. Gentlemen, I am sure you will carry this resolution in the heartiest manner possible and that you with me will wish him health, prosperity and a long life, and that the Institute may still receive his assistance and help, although he retires from the official position as its head.

Mr. J. CLARK : I rise with great pleasure to second this vote of thanks, indeed, I consider it a privilege to be so closely associated with this proposal in returning thanks to Mr. James Denny for his great services and the obvious interest he has taken in all the work of the Institute. Mr. Denny not only thoroughly deserves our thanks for what he has done, but also our thanks for what he would have done had our Council taken to heart his words at our last Annual Meeting when he said that the only complaint that might be made was that the demands upon the time of our Presidents were too modest ; they were only asked to attend the special functions, and that no doubt all our Presidents would have been only too pleased to give more of their time if that had been asked of them. So far these remarks would appear to have fallen on stony ground, but possibly they may have found congenial soil in some corner by the wayside and will yet bring forth the intended result. In taking the Chair at our Annual Dinner a few months ago one felt that Mr. Denny's words regarding the great loss our Institute sustained by the death of Mr. James Dixon, our late President, truly represented our feelings. It is difficult to estimate the extent of the influence Mr. Dixon has left us as our heritage. We are all aware that it was mainly through his efforts we have been so highly favoured by receiving the Lloyd's Register Scholarships. It is unnecessary for me to add anything regarding the Scholarships, but one has a strong feeling that, although they are highly appreciated now, they

will be even more valued and prized as the years go on. I feel that I am only voicing the prevailing feeling when I say that Mr. Denny has filled the presidential chair in an ideal manner. His firm, Messrs. Denny, of Dumbarton, we all know, are not only in the front rank as shipbuilders and engineers, but are pioneers in things pertaining to marine engineering. They were the pioneers amongst private firms in laying down an experimental tank, and the honour of pioneering the commercial application of the turbine belongs to them. Pioneering work always demands the best, and this same policy Mr. Denny has kept before him in the conduction of the Institute's affairs, as the valuable services not only he but also other members of the house of Denny have rendered, and as the records in our Transactions show. It is therefore my pleasing duty to cordially second this vote of thanks and, I might add, to express the wish that Mr. Denny's firm may long continue to flourish.

CHAIRMAN : Mr. Preston, Mr. Clark and gentlemen. When, unfortunately, during the course of last year Mr. Dixon died, your Council were placed in a difficult position. It would have been unconstitutional for them, I think, to appoint another President for the remainder of the session, in fact, I do not yet know whether it was constitutional for them to do what they actually did. You have a long line of distinguished Past Presidents, and the question was whom from amongst them were they going to choose to fill the temporary vacancy. This was an invidious position for your Council to be placed in, and they solved the difficulty by selecting the immediate Past President, which course they thought would appeal to everyone as being the more natural one to follow. As I had the good fortune to be the just retired President I have had the great privilege of acting as your President for practically a second term. The remarks made this evening have been full of interest, and our younger members should especially lay to heart those of Mr. Balfour and Mr. Turner. It is perhaps natural that your older members should largely continue in the Council and contribute papers, but the Institute can come to no permanent good unless the younger members take a share in this work. There are it is to be hoped as good brains among our younger as among our older members; along with this unfortunately there is perhaps more diffidence, but this should be striven against, and if our younger members

have ideas let them come out into the open with them and contribute papers ; even if they are wrong in their ideas, and their fellow-members take the liberty of telling them so, the experience will have been very helpful to them. Mr. Clark was most kind in the way in which he spoke of the firm of which I am a member. The pioneer work he referred to is always responsible, always difficult and, unfortunately, not always in results what had been looked for, but even so, as I think I had the privilege of pointing out to you gentlemen some years ago when a similar question arose, even when the pioneer fails he has done good work, for he is able to write up "no thoroughfare" for the benefit of others who might have spent their time in the same direction if it were not for his previous pioneering work. While on this matter let me call the attention of the members to a paper read at the Institution of Naval Architects to-day by one whom we all acknowledge in marine engineering, as a great pioneer, Mr. Parsons. He has, at considerable expense, had a vessel bought by his company and tried first as a cargo vessel with ordinary reciprocating engines, then, leaving the boilers and propeller as they were, they fitted the vessel with turbines. The turbines, running at a high speed, drove by means of gearing the original slow running propellers and shaft, it was thus possible to ascertain by direct practical trial the relative merits of a triple expansion reciprocating engine and a turbine. According to the paper Mr. Parsons read the results were very satisfactory from his point of view, as they showed from 15 to 20 per cent. in favour of the turbine. I take the liberty of recommending a careful perusal of this paper, which will really keep you up to date as to the most recent pioneering work done in marine engineering.

Mr. W. McLAREN : As I now rise to propose a vote of thanks to the office-bearers and members of Council an opportunity is given to review their work for the past year of office. It is somewhat sad on our twenty-first birthday to have to record the death of our late President, Mr. James Dixon, whose loss we all mourn, and still further has to be added to that list the name of Mr. John G. Dobbie, Vice-President, and fifteen members, nearly 16·4 per 1,000, which is a heavy death rate. With regard to the membership roll, I think you will agree with me that the office-bearers and Council have done well, and they, no doubt, as well as ourselves, regret to see so many as sixty

members lapsed, from what cause is not stated. In looking over the report of the City Premises' Committee it occurred to me to ask, what encouragement do we give the office-bearers and Council? We have 409 members within a radius of ten miles of these premises; 63 out of that number have their addresses in the City, and 225 east of Whitechapel. It is safe to state that 5 per cent. only attend the reading of papers, and if we take meetings such as those held in the London Institution, about 8 per cent. Of course I am allowing for many of these gentlemen being afloat. Then there are 66 members whose addresses are wanted; have the Council done anything to clear this point, or can we assist? I think we might be able to. It is pleasing to note the success of the monthly issue of Transactions and the revenue derived from the advertisements therein. Might I make a suggestion here for a Committee to compile a note-book which would be indispensable to the marine engineer, at a reasonable cost, containing only plain facts and formulae, with a few examples worked out on ruled paper. With regard to the Advisory Committee to the Board of Trade, Mr. George Shearer should be again specially thanked for his services, and the Library convener for unlocking the book-cases. The various other conveners also deserve our sympathy and congratulations for the work they have undertaken for all grades of the membership and in all the ramifications of the work of the Institute. The papers that have been read, I am sure you will all admit, have been of a very high standard, and those that are to follow will doubtless maintain that standard.

One point I would like to say with regard to our selection of office-bearers and Council. Let us sacrifice any ambition we may have to see our friends get on the Council and pick out the very best and most influential among our members. I would like to couple with this vote of thanks to the office-bearers and Council the name of Mr. P. T. Campbell, who tried to explode the Honorary Secretary, but he had too high a factor of safety.

Mr. A. RITCHIE (Member): In seconding this vote of thanks it gives me very great pleasure indeed to voice the opinions of the members, particularly those in Hong Kong, from which port I arrived a few days ago and where we have quite a number of members. I am very pleased to be here at the Annual Meeting and will be able to take back some of the discussions I have heard this evening. A good deal has been said

about the Council to-night, and I would just like to add one or two remarks. A suggestion was made that the ballot papers for Members of Council should be null and void unless they were completely filled up. I do not think it would be fair to the Members abroad if that idea was made law as I, for one, do not know whom I should vote for beyond those whom I have heard speak this evening, and if we are to enjoy the privileges of full membership and have not the opportunity of acquainting ourselves with all the members our vote ought to go for those we do know. I have much pleasure in seconding this vote of thanks.

CHAIRMAN : We are all very sorry Mr. Campbell is not here to-night, and he has also expressed his regret by a wired message. With regard to Mr. Ritchie's remarks, one can quite sympathize with those members who are abroad, and the point might be considered whether it would not be advisable to issue along with the ballot papers a biographical record of the members nominated.

Mr. MILTON : As Chairman of Council I thank you very much, gentlemen, for the vote of thanks given to the office-bearers and members of Council.

Mr. GEO. ADAMS : I rise with much pleasure to propose that the best thanks of the Institute be accorded to the Honorary Auditors for their services. The report of the chartered accountants has been presented to us, but in addition, two of our members have been inspecting the accounts for monies paid and received as recorded in the books. This is in itself no light task, and when we know that Mr. Clark and Mr. Robertson, busy men like the rest of us, have come here evening after evening and have given of their valuable time for the benefit of the Institute, I think we must all agree that they well deserve our thanks.

Mr. D. HULME : I have much pleasure in cordially seconding the vote of thanks to the Honorary Auditors.

Mr. A. ROBERTSON : I am sure Mr. Clark and myself thank you very much for the vote of thanks given us this evening. We look upon this work as a duty and a pleasure, and considering it as such, we get the best out of it both in your interest and in our own.

Mr. A. H. MATHER : I have a pleasant duty to perform in asking you to accord a vote of thanks to our Honorary Solicitor, Mr. W. Archer. Mr. Archer has devoted quite a considerable amount of time to studying the affairs of the Institute during this year since he has been appointed Honorary Solicitor. I may say that one point on which he is at present engaged is to find out why the Institute of Marine Engineers cannot be on the same footing with regard to Income Tax as some of the other Institutions of the country. Some of the other Institutions are exempt from this tax, but up to the present it has been paid by the Institute, and Mr. Archer has been taking up this point with some of the officers of the Board of Inland Revenue and hopes to arrive at a satisfactory issue.

Mr. E. W. ROSS : I do not know that I can enlarge on anything Mr. Mather has said, but would merely second this vote of thanks to our Honorary Solicitor.

CHAIRMAN : The next part of the programme is to give an opportunity for members to make suggestions and recommendations. It is a very wide subject and I believe Mr. McLaren has some suggestions to make, therefore I will now call upon him.

Mr. JOHN McLAREN (Member of Council) : The subject of "recommendations" is of such great importance that I am afraid I will not be able to do it full justice. I think it might have been placed in more able hands than mine. I have had lots of suggestions given to me from time to time, more especially from members who never come near the Institute. The favourite place for giving suggestions seems to me to be a railway carriage. Some people seem to think that whenever they get hold of a Member of Council in such a position it is their bounden duty to put that unfortunate member through his facings by letting him know the error of his ways and telling him what the Council should have done and what it should do, and in general treating him as a sort of first class criminal. It is the outcome of these "criminal proceedings" which several of the Members of Council have been subjected to for the last few years that I put forward a few suggestions and recommendations which I think will be worthy of consideration.

First, as you have had before you to-night the conclusion that the City Premises Committee have come to, namely, to

start a fund. As a member of that committee I can assure you that every member of it worked with right good will. They spent valuable time in thinking out the best means to arrive at the desired goal, but, as every member recognizes, the first point to be considered was where the money was to come from. As a member of the Council I am pleased that you see fit to adopt the proposal in starting a "City Premises Fund," for I suppose you have had it said to you over and over again such as "Why don't you shift the Institute to the city?" From now and onward, I don't know how long, but if any one says anything of this sort to me I will simply refer them to the fund (smallest contributions thankfully received), and if any one wishes to contribute a large amount and doesn't know how to go about it I am sure a post-card will bring our Secretary or Treasurer in attendance at once to give any advice free in the matter. Knowing these gentlemen as I do, I am sure the result will be all in favour of the Institute. Now I hope every member of this Institute will do their very best in assisting the Council in their new scheme as it is not a single-handed job, but it is every member's duty to help and look forward to the day when we may see a building that the engineers of the Merchant Service of our great Empire will be proud of, and also consider it a privilege and honour to be a member of the Institute of Marine Engineers.

Now in reference to one of the new by-laws placed before you to-night—that of making a three years' limit of service on the Council. I think it is the outcome of the desire of the present Council to arouse more enthusiasm in the affairs of the Institute. It will give all members a better chance of taking part in the work of the Institute. I hope the members, especially the younger ones, will come along and bring some new ideas, and give some portion of their time in the interests of their fellow engineers. I have often been told that you see the same old faces on the Council, year in and year out. Now we hope the members who have hung fire for years will come forward and work heart and soul to help in the good work.

One suggestion that has been put to me on several occasions, is to read papers in the city. Well, I agree. I do think to read papers in the city at least once a month for say eight months in the year would be a good thing for the Institute. I do not think a casual paper being read will ever do us any

good, but if we make it an established fact the first Monday of the month, or whatever day we fix on, that a paper be read and discussed at a hall or in a room at a hotel, the members would look forward to it—not only our members, but those of kindred societies would be pleased to come to our meetings. Having a meeting now and again in the city, is neither one thing nor the other. I am sure if the members desire that such a step be taken, the Council will be only too pleased to go into the matter and make arrangements accordingly. I should suggest that the Council might see fit to have a few lectures by paid lecturers of a scientific nature, which would be of interest to engineers as a class. Also to hold a summer meeting, say one Saturday in midsummer

Now I must touch on the lighter side of the work of the Institute, referring to our annual dinner. As you know, owing to the illness of Mr. W. I. Taylor, who has been Convener of the dinner for many years, Mr. Mather and myself were asked to help, but I say personally I was surprised at the poor support of members we had. You must bear in mind that it is not the Conveners' dinner, nor the Council's dinner, but the dinner of the Institute, and it requires and deserves support to make it a success. Coming to our annual ball. The Council has done its utmost to make it a success. I quite recognize the fact that engineers are not dancers—there is usually too much hard work attached to the profession to allow time for dancing. Our last dance had a very poor attendance indeed. The Conveners did their best to make it their business to go into figures to put it on a paying basis, but owing to the poor attendance we came out on the wrong side. What I do say is if we do not get better support, we will require to cut the ball out of our yearly programme.

When members have any ideas or suggestions which they think would improve the standing of the Institute, they should write to the Council, who I am sure will give the suggestion every consideration; but the members must understand that it is not an easy matter to please every one, and if a suggestion put forward by a member is rejected after due consideration, I hope and trust that the member will take the rejection in the right spirit, for I am sure the Council never has rejected and never will reject any suggestion which would prove beneficial to the welfare of the Institute.

In conclusion, I may add that we are deeply indebted to

our Chairman, Mr. James Denny, for the example he has set to us in the interest he has taken in everything pertaining to Marine Engineering, and more particularly to the Institute of Marine Engineers. I am sure if every member of the Institute had the same amount of enthusiasm as our Chairman, there would be no reason to complain. I might, if I am in order, make it known what sacrifice Mr. Denny has made for the Institute. I will give you one instance. Mr. Denny, as you know, presided at our dinner, and travelled the night previous to be there. I had occasion to see him in the afternoon—there he was hard at business, then he came and gave us an excellent speech, and then caught a train at midnight, to be ready for a trial trip the following morning. I only make this remark to show the fine example we have set before us of sacrificing personal comfort for the Institute.

CHAIRMAN: These are some suggestions, and the Council invite the members to follow them up with others. There is only this one chance in the year, and now is the time to take advantage of it. Members will understand that in adopting the report they have also adopted the report on the City Premises scheme. It is embodied in the Annual Report, and when the Annual Report is adopted, it includes all.

Mr. W. E. FARENDEEN: I would like to second Mr. McLaren's proposition with regard to having a paper read once a month or so in the City. If it were on the first Monday in every month during the Winter session, I think it would bring the members more together; they would know definitely the night of meeting, and there would be a better attendance at the meeting to hear the papers read and discussed. We have had meetings at different times at the London Institution, but they were only casual ones now and again, but if it were known that the meetings would be held in the City on some definite evening, say the first Monday in each month, say from September to April, I do not think there would be any trouble about the attendance. The papers, I have no doubt, are gone carefully through by the Council, with a view to seeing that they are original because, after all, all institutions are known, to a great extent, by their Transactions.

Mr. W. P. DURTNALL: As Mr. Denny says, there is only one time in the year for members to voice their opinions, and

I would take this opportunity of making one suggestion ; I would appeal, if I may, to the members of this Institute, to make up their minds to attend the meetings when interesting papers are read and discussed, in rather larger numbers than have been present at some which I have had the privilege of attending. Members should bear in mind that when authors put original thought into papers, and in view of the immense advances taking place, it will be to the benefit of all the members, if only they will attend and join in the discussion. I have learnt many things since I joined this Institute, and I have benefited from them. It would be to the benefit of all the members, and possibly might induce others to join. I know of many engineers who would only be too pleased to give their views on subjects both in connexion with electrical and mechanical engineering. They think a lot of a good meeting, and a good discussion above all things.

Mr. JAS. TURNER : As it is ten years ago since I was in England, I would like to make a remark in connexion with the reading of papers. It seems to me that the writers of papers have an audience not represented by the number at the meeting. The Transactions go all over the world, and any attempt to curtail the number of papers would be a process of starvation to your members who cannot be here. Every man has to use his selective faculties, and out of the morass of matter select that which will be the most useful to himself. The policy, therefore, should be to get every possible paper on every possible subject, and leave it to the members to read what interests them most. With regard to a larger proportion of the members not being present when the paper is read, it may not be very gratifying to the one who writes the paper, but I think he ought to recognize that he has a much larger hearing than is represented by the members present.

Mr. AITKEN BROWN : Mr. McLaren suggested that we might have paid lecturers. In regard to that, the question arises, would the paid lecturer allow his papers to be printed and published and distributed among the members. The next point would be the cost of engaging these lecturers, and the cost of printing. In my opinion a paid lecturer would not allow his lectures to go before the whole world. I do not see that we require to make a change in that direction, as hitherto we have been very well served in the matter of papers ; in

fact, some of the papers could not be surpassed by paid lecturers. We have had some of the best men in the kingdom giving papers here, and I do not see how we could better it. With regard to the attendance at the Annual Ball and Annual Dinner, there was a very good number present on both occasions, and if many of them were not members of the Institute, I think it is a compliment to the Institute, that they should want to come. With regard to having eight papers or lectures in the City; a lecture occasionally in the City, I think, would do a good deal to put new life into the Institute, but I think eight would be too many, three or four a session would be quite sufficient in my opinion.

Mr. W. McLAREN : I think we are getting a bit away from the point. I gave a few statistics of the number of members in and around London, and also of the attendances at the meetings. This is a point that has been thrashed out over and over again; the members cannot be got to attend in large numbers. It is all very well to talk about having the meetings in the City, but meetings have been held in the City almost every session, and the attendance has been no better. Sixty-six members have City addresses, in the south of London there are sixty-one; in the north of London twenty-two, and there are 225 east of Whitechapel; in the west there are twenty-one; in the north-west fourteen; and that makes 409 in all, yet what is the attendance? Then we have members isolated in far parts of the world, in Brazil, Holland, Greece, the West Indies, Las Palmas, India, China and all over; these members want as many papers as can be sent out, and I hope they will be sent out frequently.

Mr. F. M. TIMPSON : I think Mr. Turner raised the important point that we should not forget the outside membership, they are the members who require the papers most of all. Mr. Farenden's suggestion that papers should be read in the City is a good one, but I do not think we should limit the number, or that they should be less in number than at present.

CHAIRMAN : I think Mr. Turner's suggestion is rather that there should be more papers.

Mr. J. T. MILTON : If it is not too late I would like to endorse the words of Mr. Turner on behalf of the outport members. I

think one of the remarks you, Mr. Chairman, made earlier in the evening will show what I mean. Our outpost members look to the Transactions for keeping them up to date in matters connected with their profession. You have referred to a very important paper read to-day in another Institution ; it is very desirable that our members should know about these things, and if the Council could see their way, it will be well to include in the Transactions, extracts from papers, such as that of Mr. Parsons, which would be of interest to the members generally.

CHAIRMAN : Unless they are copyright.

Mr. MILTON : That is what is done with many other Institutions.

Mr. A. H. MATHER : We have had a number of suggestions from the members to the Council ; might I make a suggestion to a particular section of our members which occurred to me while Mr. Ritchie was speaking a while ago. He referred to coming here and making our acquaintance. We are exceptionally fortunate in having representatives from the far ends of the earth with us this evening, and although we have occasionally had one or two at previous meetings, we do not often have them with us and taking part in our discussions. Mr. Ritchie of Hong-Kong and Mr. Turner of Tientsin will, I am sure, have a different conception of the work of the Institute, and the suggestion is that when these gentlemen go back to their friends in those districts, they will impress upon them the desirability of getting in touch with the Institute when they are home on leave in London.

Mr. J. HALLETT : With regard to the City Premises report, I understand it was included in the Annual Report, and has been accepted by the members. Might I venture to point out that the City Premises' Committee has come to an end, and it is necessary that they should be reappointed.

CHAIRMAN : I think the work naturally falls to the Council. All that is proposed is to start a fund.

Mr. HALLETT : This Committee was, I believe, proposed and nominated at the last Annual Meeting.

CHAIRMAN : I think it is all in order ; the Committee recom-

mend that a special fund should be started, and the Council would deal with the matter.

Mr. MILTON : They further recommend that a Committee be formed.

CHAIRMAN : The point is whether this Committee is to be elected by the members or by the Council.

The HON. SECRETARY : I think they should be selected by the Council.

CHAIRMAN : That can be left in the hands of the Council, no doubt. The scrutineers, Messrs. P. Smith and C. M. B. Dyer, will now present their report.

Mr. P. SMITH, R.N.R. : As scrutineers we have gone through the ballot papers and find the result to be as follows :

President : Sir David Gill, K.C.B.

Hon. Secretary : Mr. Jas. Adamson.

Hon. Treasurer : Mr. A. H. Mather.

Hon. Minute Secretary : Mr. J. G. Hawthorn.

Hon. Finan. Secretary : Mr. E. W. Ross.

I would like to add a few remarks. There has cropped up what is rather an anomaly. I have been scrutineer on several occasions and the same thing has occurred before, but it did not affect the position very materially. On this occasion, however, a gentleman who has been for many years a member of Council has not been returned simply because thirty-three voting papers were sent in placing him as an office-bearer. Had those thirty-three votes been given to him as a member of Council he would have been elected as such, whereas he comes in seventh on the list. The analysis of the voting is here, and I will hand it over to the Hon. Secretary. The matter ought to be made generally known, but we could not legally transfer the votes from office-bearer to member of Council, and I think we are justified in acting according to the votes as received.

Mr. RUTHVEN : Will I be in order to make a remark with regard to the counting of the votes ?

CHAIRMAN : Is it desirable ? We trust the scrutineers, and it might be very unwise to raise such a point.

Mr. RUTHVEN : It is in reference to future counting. It was with regard to the situation which arises when a member of Council is also voted for as an office-bearer. I propose that in future the votes given to him as an office-bearer be included among those given to him as a member of Council.

Mr. MILTON : Mr. Ruthven's question is in regard to future voting. May I point out that for the future, Article 34, which we have already passed, will deal with this question except as regards the Honorary Secretary and Honorary Treasurer. The articles provide that the Council shall consist of fifteen members and the Council will appoint two of the office-bearers from among their own number. For the future, except for the positions of Honorary Secretary and Honorary Treasurer, such an event will not occur again.

The HON. SECRETARY : Before we separate I should like to give out one or two intimations in order to back up some of the remarks made to-night. On Monday night we are to have an interesting paper on "An Improved Electrical Apparatus for Warping, Winding, Hoisting, etc., on Board Ship," by Mr. Liddle, who is coming all the way from Scotland to read it, and I trust he will get a good audience to listen to his paper. With regard to one or two remarks by Mr. W. McLaren in the matter of the lapsed members ; that is a question which has exercised the mind of the Council, and especially a few of us, very considerably for some years. We seem to lose touch with some members during the year for one reason or another, perhaps they remove and fail to notify their change of address. I have had letters from the far ends of the earth from members complaining that the papers are not received and on probing into the subject it was found that they had not informed us of their change of address. The Institute may claim to be many-sided, but there is one thing we have not got and that is a system of wireless telegraphy to all the members whose names are inscribed on our roll. That is a point where members may help the Council by jogging the memories of those members whose addresses we do not know. No doubt some of those members will be on the lapsed list next year unless those who are here to-night help us to obtain their addresses and maintain their interests. I apprehend that neither Mr. Farenden nor Mr. McLaren wish to curtail the number of

papers ; but they mean that although papers might be read in the City once a month the remainder of the papers might be read here. As you know we issue the Transactions once a month and there is, as you know, a good deal of labour entailed in issuing them at such frequent intervals, but I, who perhaps carry the heavy end of the stick, maintain that we should not diminish papers, mainly for the reasons stated by Mr. Turner. With regard to the question of having a paid lecturer, on one occasion we had a paid lecturer at a meeting in the City, and it was one of the largest meetings we ever had. I daresay some of the members here present will bear me out when I say that it was an exceedingly interesting one. I only make this remark in defence of Mr. McLaren's suggestion ; the success depends on the lecture and the selection of the lecturer. In this case we had the paper printed. I was very pleased to notice that at one of our recent meetings we had an even larger representation from the far ends of the earth than we have to-night. We had members from Australasia, China and India, and it was quite a pleasure to know that they were amongst us, and that they came to our meeting that night to listen to the paper then read. With regard to other intimations I might say that we have now arranged a series of visits during the summer months. So far we have arranged to pay a visit to the London Coliseum on Saturday, April 16, to see the stage machinery at work. Then in May we pay a visit to St. Bartholomew's Hospital. That may seem a long way from engineering, but those who were through the London Hospital a year or two ago thoroughly appreciated the visit, and to my surprise it was one of the largest attendances we ever had. We have also arranged a visit to the Japan-British Exhibition in June, when two papers will be read on "The Internal Combustion Engine," and on September 17, we pay a visit to the Naval, Mercantile Marine and Engineering Exhibition at Olympia. In connexion with the Awards, I am pleased to intimate that the Committee have arranged competitions in connexion with the Stephen Awards, value £2, in books or instruments, or towards the payment of class fees on the option of the successful candidates. These are open to competition to the Associate Members and Associates. The Ritchie award to the same value will be open for competition to the Graduates. For the Associate Members the subject of the paper is :

The Propeller Shaft for triple engines of the following dimensions : Cylinders, 33 in., 53½ in., 86 in. by 60 in. stroke, 180 lb. steam pressure, from design to completion in place, with descriptive notes on different designs of fitting to facilitate subsequent examination, ease in working and economy in up-keep.

For Associates :

The Bilge Pump and connexions, with descriptive notes on faulty designs and on the best and most convenient design for safe working.

For Graduates :

The Steam Engine Condenser, with descriptive and historical notes on its design and function in the economy of the steam engine, also the various types and methods of packing tube ends.

Then we propose this year to have an additional competition, an open one, on "The Feed Pump and Connexions, including the independent type, with descriptive notes on designs and the details applicable to marine work." Thus in addition to the two Stephen awards and the Ritchie award—and we are very glad to have Mr. Ritchie with us this evening to listen to these particulars—we propose to give this open competition, which can be competed for either by Graduates of the Institute or engineering apprentices throughout the Kingdom. That is a slight departure which the Committee have recommended and which the Council have approved. With regard to the Lloyd's Register Scholarship we have the arrangements so far made that the full particulars will be in the hands of the members within a very short time.

Mr. GEO. ADAMS : I would like to add one word with regard to the out-door gatherings in reference to Mr. Adamson's remarks in connexion with the visit to the Hospital. During our visit to this Institution last summer we saw apparatus and means of sterilizing the air when operations were being performed, which was most interesting and instructive, especially in view of the fact that the question brought prominently before the refrigerating engineering world to-day is the improved carriage of meat cargoes by means of sterilizing the air. So that the apparatus and explanations given to us of these appliances for the preservation of life, were interesting to us, because the same means are applied for the preservation of the

means of life to the body, and so we learnt much of the other side of engineering which in some respects is similar to our own.

Mr. N. K. McLEAN : I rise to propose a vote of thanks to our Chairman. He has already had a vote of thanks accorded to him for acting as President ; but for the genial way in which he has presided over the meeting he deserves our best thanks. We are only sorry that he is about to part from the Institute as its presiding Office-Bearer.

Mr. A. E. BATTLE : I have much pleasure in seconding this vote of thanks. It is one great sign of a healthy Institute to have a healthy annual meeting, and one great necessity on such occasions to have a masterly Chairman, and when, as we have had to-night, the masterly Chairman is combined in a masterly engineer, the Institute is to be congratulated.

The motion was carried with much applause.

CHAIRMAN : I thank you very much. It is always a pleasure to be here, because you make one believe that you really like to have him with you, and when this is the feeling that is inspired the wonder to me is that your Presidents are not much more regular in their attendance. Mr. Milton made a suggestion this evening which your Council might take into their serious consideration. It is one of the most valuable that has come before us this evening. Many of the outport members have little opportunity of knowing what is going on, and if in the monthly Transactions were incorporated notes of any changes, advances in the practice of marine engineering, they would be very much welcomed. As to the City Premises scheme, it is a matter of money. Perhaps you should not depend too much upon others beside yourselves, but still you have past Office-Bearers, you have other influential people who have been connected with you ; you have many shipowners who are naturally much interested in you ; you have a large field to work on if you choose. No doubt if you put the matter before your friends in a suitable way, it need not be long before this new scheme is in a fair way to success and the members be asked to consider some definite scheme as to locality and otherwise of the new premises.

The Honorary Secretary intimated that an Extraordinary General Meeting would be held on April 4 to confirm the resolutions passed with regard to the alterations to By-laws.

An adjournment was then made for coffee, and the meeting closed.

It may be well here to explain in response to the comment made by the Chairman when summarizing the Annual Report that the references made to education and experience were brought about by some correspondence initiated by the receipt of a memorial from a Board of Education authority advocating that technically trained students should be allowed to sit for examination for a marine engineer's provisional certificate before going to sea, and that successful candidates should, on the expiry of twelvemonths' sea service, be entitled to a second class engineer's certificate *without further examination*. The obvious objections to such a course were pointed out to the Authority in question very fully, and several papers and discussions which have appeared in the Transactions of the Institute were forwarded, so that the views of the practical side of the subject of a marine engineer's training might be fully considered along with the theoretical.

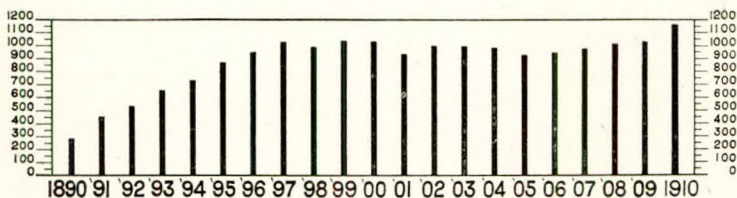
Referring to the proposed open competition for an award, to be granted to a Graduate of the Institute or to an apprentice engineer eligible as a graduate, for a paper on the subject stated, under the Regulations of the Awards Committee, it is with pleasure we make the announcement that the amount of the award will be contributed by one of our highly esteemed Companions, Mr. Robert Clark.

* The undernoted diagram was constructed by Mr. W. Newall (Member) to illustrate the progress of the Institute in respect to its financial and numerical aspect.

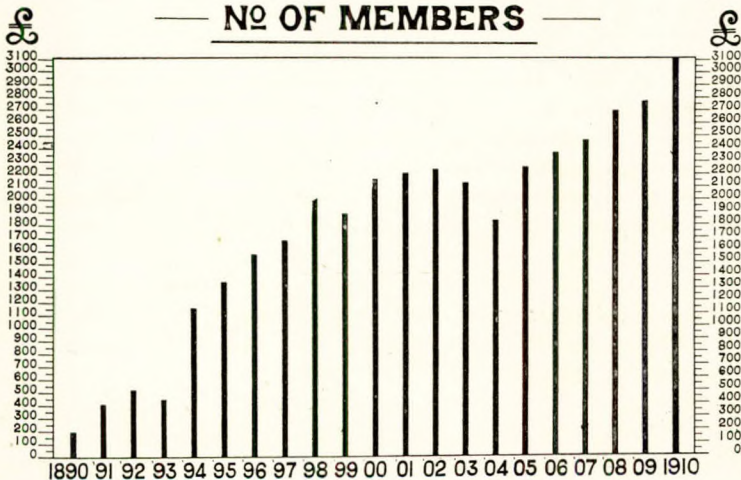
* See page lx.

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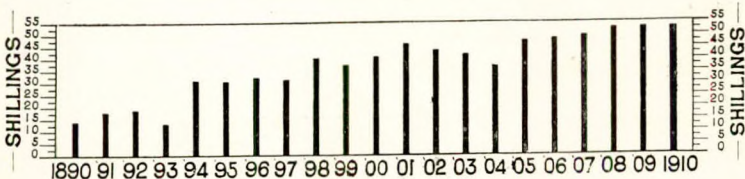
OUR 21ST BIRTHDAY



NO OF MEMBERS



REVENUE ACCOUNT



VALUE PER MEMBER

JAS. ADAMSON, *Hon. Secretary.*