

INSTITUTE OF MARINE ENGINEERS.
INCORPORATED.

Patron: HIS MAJESTY THE KING.

SESSION



1920-21.

President: LORD WEIR OF EASTWOOD.

Minutes of Proceedings
AT THE
Annual Meeting

ON FRIDAY, APRIL 1st, 1921, at 6.30 p.m.

CHAIRMAN: THE PRESIDENT.

The PRESIDENT: My remarks to-night will be brief, in view of the extent of the agenda before me. I need hardly tell you how much pleasure it gives me to preside over what I notice is the thirty-second annual meeting of the Institute, which is becoming quite a venerable body. I feel sure that age has merely stimulated our enthusiasm and our general health. To-night the different reports of our office bearers and Council covering their activities during the past Session will be laid before us. It would not be right for me to anticipate these reports, and therefore I will merely say that they reflect a prosperous session and a very healthy state of affairs generally. Very grateful thanks are due to our self-sacrificing and capable office bearers and Council; you will be given the opportunity of

acknowledging your debt to them to-night and I trust you will not think me invidious if I seize this opportunity to acknowledge our debt to one who has been and still is the life and soul of the Institute, I refer naturally to our old friend, Mr. Adamson. We hope he will be long spared to contribute to the prosperity of the Institute he has done so much to create. I have another very pleasurable duty to-night and that is to congratulate the Institute on its wisdom in the nomination made for the presidency of the Institute and also on its very good fortune in obtaining Sir Joseph Maclay's acceptance of office. I think I may say we have proof to-night of our wisdom in that Sir Joseph Maclay has been good enough to come here to-night to attend our Annual Meeting, to see you and the premises of the Institute and to hear of the work done in the last session. In looking at the papers last night he had the unique privilege of attending the funeral obsequies of his own great creation, the Ministry of Shipping. We congratulate him on his release from the very great and arduous duties and responsibilities which devolved upon him in that office; the nation and the Empire owe him an enormous debt of gratitude for that. But here at this Institute of Marine Engineers we can think of Sir Joseph Maclay apart altogether from the national work he has done because we think of him as a practical shipowner, one who has been the guiding spirit in the control and conduct of the great fleet which he knows so intimately. He knows the men and the work the men are doing. He is one of that class of shipowners who have built up the great mercantile marine with which we are all so closely associated. No one knows Marine Engineers better than he does or appreciates the work they do. Let me assure him he will be the President of no mean Institute but of one which was a great and valuable influencing factor in the development of marine engineering. In the conduct of the Institute he will find, as I have found, that Marine Engineers are most kind to their President, and that he can always count on their loyal and full support, and I ask you to give him to-night a very hearty welcome indeed. I will now ask you to appoint the Scrutineers to examine and report upon the voting papers.

Mr. W. H. INSON: I have the pleasure of proposing Messrs. W. G. Brawley and H. Rue as Scrutineers. This was seconded and approved.

Lord WEIR: I will now call on Mr. Adamson to read the report.

A marconigram was received from Mr. Jas. M. Dewar, Chairman of Council, despatched from Paris, expressing regret for his absence from the meeting, which he had hoped to attend, and conveying his best wishes.

The Annual Report for session 1920-21 was then read by the Hon. Secretary as follows:—

On January 31st we completed the 32nd year of our operations, and during the past year these have been well maintained to further advance the rising tide of progress and extension.

As we record the names of those who have been placed on our obituary roll our sympathy for the relatives of the departed is re-awakened. Several of our old members, retired from active life, have resigned with mutual regrets.

THE MEMBERSHIP ROLL has been considerably increased. The Student Graduates appear for the first time, and we welcome this addition to our roll, especially as a section of them has established a branch in Aberdeen.

The resolution remitted from last annual meeting to increase the entrance fees and subscriptions by 50% was duly ratified, and is now in force.

The total membership at the close of our financial year, with the changes that have taken place, is shown in the tabulated list.

MEMBERSHIP.	Jan., 1920.	Transfers from to		Elected.	Died.	Re- signed.	Ad- dresses wanted.	Jan., 1921.
Past Presidents (Non-Members), Hon. Vice-Presidents and Hon. Member	13	—	—	—	1	—	—	12
Members	1,727	—	14	264	14	14	9	1,968
Associate Members ..	129	9	2	24	—	—	—	146
Associates	49	6	4	19	—	—	—	66
Graduates	51	4	—	25	—	—	1	71
Student Graduates ..	—	—	—	11	—	—	—	11
Companions	83	1	—	9	—	—	—	91
Totals	2,052	20	20	352	15	14	10 §	2,365

§ Several who were noted last year under the heading "Addresses wanted" have come into touch again, and the roll has been examined and checked to arrive at the nett result.

The following awards have been allocated:—

DENNY GOLD MEDAL to J. H. Anderson, Member, for his paper on "The Winning and Preparation of Coal," read February 24th, 1919; books and instruments to the Student Graduates who gained highest marks in each subject at the examination: Theoretical Mechanics, W. Manley, Aberdeen; Heat and Heat Engines, W. M. Smith, Newcastle; Machine Construction and Drawing, R. Maxwell, Newcastle; Applied Mechanics, W. R. Anderson and W. A. Cameron (equal), Aberdeen; Mathematics, L. E. Feather, Newcastle; English, J. M. Mitchell, Aberdeen; Electrical Engineering, G. W. Oman, Newcastle; Highest aggregate marks in all subjects; R. B. Miller, Newcastle.

LLOYD'S REGISTER SCHOLARSHIPS of £100 per year for three years; Chas. W. Turner, Cardiff, and John Knox Brown, Barrow. The former is attending Cardiff, and the latter Glasgow University. Awards have also been allocated to these for progress in their studies.

The Committee of Lloyd's Register kindly added a third Scholarship for competition in June or July, 1921. Many enquiries have been received from parents and guardians for advice regarding training and apprenticeship. The prevailing conditions have rendered it difficult to find vacancies in works for applicants.

THE TITANIC ENGINEERING STAFF MEMORIAL FUND has been administered in respect to the interest accruing from the invested capital, by giving donations to various Institutions and to help relatives of Marine Engineers in their need. We have kept in touch with those who have been assisted in past years, including orphans placed in the Institutions. A child of one of our late members has been recommended for the Royal Merchant Seamen's Orphanage this year. Wm. Murdoch, Member, who died at Dunoon, January 23rd, left £200 by will for this fund. This will be invested and the interest used. Several donations have also been received from members during the year.

Wm. Murdoch has also left £100 for a memorial award to be given as may be arranged in a similar way to the Stephen and the John I. Jacobs memorial awards.

THE READING ROOM AND LIBRARY have been largely used by visiting members, and books consulted for information and reference. A large number of volumes have been presented

during the year by authors, publishers and members. These have been noted and reviewed in our monthly issues.

THE LECTURES, with illustrations, on subjects of general interest for ladies' nights, have been given about once a month during the session.

MEETINGS HELD DURING 1920-21.

- 1920.
- Feb. 10th. "The British Imperial Antarctic Expedition," by Com. Cope, B.A. Lantern views. Ladies' night.
- Mar. 16th. "Encouragement of Invention in Workshop," by J. Hamilton Gibson, O.B.E. (Member).
- May 8th. Visit to Works—Messrs. J. Stone, Deptford.
- " 29th. " " —Messrs. J. Dewrance, Southwark.
- June 26th. " " —Skefko Ball-bearings, Luton.
- Sept. 3rd. Extraordinary General Meeting *re* Increasing Fees.
- " 21st. "A Voyage to the East," by F. O. Beckett (Member). Lantern views. Ladies' night.
- " 24th. Meeting confirming Resolution to Increase Fees and Subscriptions by 50%.
- " 25th. Visit to Works—Messrs. Fraser & Chalmers, Erith.
- " 4th to 25th Machine Tools and Allied Industries Exhibition.
- Oct. 5th. Visit to the National Physical Laboratory.
- " 12th. "The Screw Propeller—Special Type," by Major J. H. W. Gill, C.B.E. (Member).
- " 20th. Conference *re* Lectures and Papers on the Internal Combustion Engine.
- " 26th. "The Solid Injection Oil Engine," by C. McTaminey (Member).
- Nov. 9th. "A Marvellous Magician," by J. B. Hall (Member). Illustrations. Ladies' night.
- " 16th. "Oil for the Internal Combustion Engine, with Experiments," by J. L. Chaloner (Member) and T. Mackenzie.
- " 23rd. "Some Suggestions on the Training of Engineers," by Anson S. J. Hall (Member).
- " 30th. Kinema Film—"The Production of Oil," by courtesy of The Anglo-American Oil Co.
- Dec. 7th. "Lighthouses," by G. J. Wells (Member). Lantern views. Ladies' night.
- " 14th. "Lubricating Arrangements for Internal Combustion Engines," by E. G. Warne.
- " 21st. "Notes on the Management of Marine Diesel Engines," by Homer McCririck (Member).
- 1921.
- Jan. 4th. "The Internal Combustion Engine Gearing," by Walter Pollock (Member).
- " 11th. "Electronomy," by W. Brook Sayers (Member). Lantern views. Ladies' night.
- " 18th. "The Internal Combustion Engine—Fuel, Valves and Ignition," by A. W. Bradbury (Member).
- " 25th. "The Manufacture of Marine Propellers," by W. Lambert (Member).
- " 28th. Annual Dinner.

THE PAPERS read during the year are detailed in the programme. A special course was arranged, as a result of a conference held on October 20th, on the subject of the Internal

Combustion Engine. Our meetings have thus been held every Tuesday evening to embrace the programme, and the attendances have been good. We are indebted to Mr. Wm. McLaren for working the lantern at the meetings, which he has attended regularly.

Thanks are accorded to members and friends who have contributed papers and illustrated lectures for the general good.

THE PROPERTY has been kept in condition, cleaned and overhauled as necessary. Our tenant in the basement has found it necessary to look for additional accommodation to meet his growing requirements, and negotiations are pending with a view to accepting a sub-tenant. The Lecture Hall has been granted on Monday evenings to the Association of Engineering and Shipbuilding Draughtsmen and on Wednesday evenings to the London Shipping Orchestral Club for their respective meetings, and the Library to the Engineer Surveyor's Association for meetings on the first Saturday evening in each month.

THE SIX VISITS TO WORKS on Saturday afternoons in the summer have been described in our monthly issues; also the official visits paid to exhibitions. The Shipping, Engineering and Machinery Exhibition to be held in Olympia next autumn is in course of arrangement. The Institute is represented on the Committee.

THE SOCIAL EVENTS of the year were the up-river trip on July 10th, and the Annual Dinner on January 28th, when Lord Weir presided.

THE ADVISORY COMMITTEE to the Board of Trade has dealt with several recommendations and considerations in connection with the Merchant Shipping Acts and Safety of Life at Sea. Mr. J. Shanks is our representative on the Committee.

THE BRITISH MARINE ENGINEERING DESIGN AND CONSTRUCTION COMMITTEE has carried out some important work during the year in connection with boilers, shafting, and other details. As a result of the work done by the Committee a Conference was held by Representatives of the Board of Trade and the Classification Societies when a set of Rules was formulated for boiler and steam pipes closely on the lines recommended by the B.M.E.D. and C. Committee, so that practically the Rules of the Board of Trade and the Classification Societies are harmonised. The attainment of this end is very satisfactory to all concerned and stands to the credit of the Committee. Our repre-

sentatives on the Committee are Messrs. B. P. Fielden, J. McLaren, H. Rennie and A. Walker.

THE RESEARCH COMMITTEE, INSTITUTE OF METALS, has also done valuable work, as evidenced by the reports which have been issued from time to time. Mr. A. Boyle represents us on the Committee.

THE ENGINEERING TRAINING ORGANISATION COMMITTEE has completed the preliminary work on which it was engaged; a useful report with information and advice on education and training of engineers was published, and the Committee has been dissolved.

Our thanks are tendered to Lord Weir, our retiring President, for his kindness by remaining in office during a second year. His deep interest in the various sections of the work of the Institute has been greatly appreciated.

THE HON. TREASURER submitted the report of the Auditors and the Balance Sheet.

The Auditors have reported very fully in detail and drawn attention to all the main items showing where increases and decreases in income and expenditure have occurred and it is gratifying to find as a result of the year's working that in place of a deficit we have this year a credit balance in the Revenue Account amounting to £265 5s. 7d.; this is no doubt due largely to subscriptions being more fully paid up to date; the Council are anxious that this should continue as it undoubtedly makes the clerical work easier and obviates the necessity for sending out so many reminders for subscriptions in arrear. It has been the policy held in abeyance during the war to treat members more than three years in arrears with their subscriptions as lapsed, their names being omitted from the printed list.

The receipts from entrance fees again show an advance, which for the past five years have been:—

1916/17, £199 6s. 0d.; 1917/18, £113 14s. 10d.; 1918/19, £198 8s. 5d.; 1919/20, £316 6s. 0d.; 1920/21, £331 18s. 0d. The whole of these entrance fees are now being credited to the Revenue Account as was done last year.

You will note that the amount standing in the Accounts to Subscriptions paid in advance is very considerably in excess of last year, viz., £300 8s. 4d., as compared with last year, when they stood at £153 19s. 8d. This item, however, is not taken into account when arriving at the income for the current year,

all subscriptions entered into Revenue Account are those received for year ending 31st January, 1921.

During the coming year we shall have an increased revenue due to the advance in subscriptions and entrance fees, and this will enable the Council to meet the increased cost of general running expenses. The Council have already increased the Honorarium of our esteemed Honorary Secretary, as from the 1st February, 1921.

In accordance with the recommendation of the Honorary Auditors last year, the income from Life Members' subscriptions is being used from time to time to increase the Sinking Fund policies, a further policy for £2,000 having been taken out this year with the Royal Exchange Assurance Company at a cost of £112 17s. 2d., which still leaves a balance in hand of £34 2s. 10d., and the Honorary Auditors suggest that a further £1,000 policy be obtained; this would make a total Sinking Fund of £13,000.

Our investments now stand at £134, consisting of three £5 National War Bonds and £200 Consols, the latter standing to the credit of the John I. Jacobs Memorial.

There has been a balance on deposit account at the Bank during the greater part of the year, this now stands at £750 and will be kept up as much as circumstances from time to time will allow, it is earning interest and is obtainable at a moment's notice when required. The amount of £4,134 6s. 9d. standing to Revenue Account, which is really an accumulation during the history of the Institute, is now merged into Capital Account and in future accounts will appear as such.

The Social Events, such as the Dinner, *Conversazione* and River Trip of last year are kept in a separate banking account, and though it has not been possible to submit a final statement for the Dinner, I am able to assure members there will be no loss, as owing to our President's generosity, both the Dinner and *Conversazione* Accounts will square, in fact when all the tickets are paid for, and there are a few only to come in, I am anticipating there will be a surplus of a few pounds on the Social Events Account which our Honorary Auditors suggest, and our President concurs, should be passed over to the Titanic Fund—this, if agreed to, will therefore be done at a later date.

Insurance on these premises is an important item and members will probably like to know how we stand in this respect.

All our insurances is in the hands of the Royal Exchange Assurance Company, and is as follows:

	£
Fire Policy No. 8004291—on building	20,000
Contents	5,000
1 year's rent	750
Total ...	<u>£25,750</u>

Burglary Policy No. B. 208115—on contents ... £5,000

Employers' Liability Policy No. E.L. 208107.

During the year the Institute Banking Accounts have been transferred from the London County, Westminster and Parrs Bank, Ltd., Stratford, to Barclay's Bank, Ltd., Head Office, 170, Fenchurch Street, E.C., this has been done to meet our present requirements and convenience. Will members who pay annually through their bank kindly take note of this alteration.

During the past year the Quinquennial Valuation for the assessment of these premises has taken place and the total assessment has only been increased from £622 to £627, and now stands at £455 for the part of the premises used by ourselves and £172 for the basement, which is let.

Any increase in rates due to either increase of assessment or the rate payable in the £ on the assessment on the basement portion of the building is paid by our existing tenant.

An item appears in the accounts showing subscriptions towards our previous Treasurer's Testimonial, but now stands at a higher figure. It is gratifying to think that our members have fully appreciated the vast amount of work he put in during the 13 years he officially held this office, although actually he carried out the duties for a total period of 15 years, and there is no doubt it is a well-merited recognition on behalf of the Institute for able service.

31st March, 1921.

To the Members,

THE INSTITUTE OF MARINE ENGINEERS,

TOWER HILL, E.1.

GENTLEMEN,

We have to report that we have examined and checked the Accounts of your Institute for the year ended 31st January, 1921.

The Revenue Account shows a profit of £265 5s. 7d. against a loss last year of £140 8s. 7d., a difference of £405 14s. 2d.

The Gross Revenue for the year is £3,254 9s. 7d., an increase of £452 7s. 7d., made up as follows:—

	Decrease.	Increase.
	£ s. d.	£ s. d.
Subscriptions	—	154 19 6
Entrance Fees	—	15 12 0
Interest	2 16 10	—
Transactions Section	—	15 1 0
Advertisements	—	151 18 1
Rent Receivable	—	126 18 10
Charges to Tenant for Heating and Cleaning	—	24 15 0
Sale of Anvil and Lathe	—	15 0 0
Exhibition Tickets	—	0 5 0
Special Donations	49 5 0	—
	52 1 10	504 9 5
Deduct Decrease	—	52 1 10
Increase as above	—	£452 7 7

The expenses charged to Revenue amount to £2,989 4s. 0d., as compared with £2,942 10s. 7d. a year ago, an increase of £46 13s. 5d., made up as follows:—

	Decrease.	Increase.
	£ s. d.	£ s. d.
General Expenses	49 5 5	—
Rent, Rates and Taxes	—	126 16 0
House Account	—	4 16 5
Repairs and Redecoration of Institute	88 14 2	—
Insurance	—	13 17 11
Papers and Discussions	—	2 15 5
Transactions Sections... .. .	—	20 10 8
Library Account	—	14 3 0
Depreciation	2 16 11	—
Donation included as outstanding in last year's accounts not received	—	36 0 0
Legal Expenses	9 14 0	—
Agent's Commission letting Basement	15 0 0	—
Loss on Exhibition Tickets	10 6	—
Loss on Concert and Dance Account	6 5 0	—
	172 6 0	218 19 5
Deduct Decrease	—	172 6 0
Increase as above	—	£46 13 5

The difference between the increase of £452 7s. 7d. in Revenue and £46 13s. 5d. in Expenses is £405 14s. 2d., as mentioned in paragraph 2.

The increase in Revenue is due chiefly to increases in Subscriptions, Advertisements and Rent Receivable.

The increase in Expenses is chiefly due to Rates and Taxes.

The Balance standing to the credit of the Dinner Account represents the balance between money received for tickets and expenses paid up to 31st January, 1921, and will be carried forward to next year's account, which will show the financial result.

The total Expenditure on the City Premises, including the Premium paid on Royal Exchange Assurance Company's Sinking Fund Policy for £10,000 amounts to £15,160 17s. 1d. The two Sinking Fund Policies taken out up to 31st January, 1921, amount to £12,000. No provision has been made in the accounts for the redemption of the excess over this amount as it is understood that further Policies will be taken out from time to time until the full amount of the Expenditure has been covered.

The Investments in Stocks and Shares that remain are taken at the values as at 31st January, 1919.

We have verified the Investments and the Bank Balances, and have inspected the Title Deeds. 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 Institute's affairs according to the best of our information and the explanations given us and as shown by the books of the Institute.

Yours faithfully,

WEST & DRAKE,

Chartered Accountants.

Mr. JOHN McLAREN: It is my agreeable duty to propose the adoption of the Annual Report of the past session. It is very gratifying to know that we are in such a stable position after the years of trouble and financial worry we have gone through. Great credit is due to the Council for the very able manner in which they have transacted the business of the Institute and brought this pleasant state of affairs about. One particularly gratifying item in the report is the increased membership, and I think we should get even more members if those outside the membership knew what we were doing. Engineers abroad do not have the opportunity of knowing what the Institute of Marine Engineers is. Personally, I think it is on the road to being one of the principal technical institutions in the world, its work extends to the four points of the compass; after going through the great war, this increase is astounding. I remember a time when we were hoping that we could bring the membership up to a thousand. I think we have got to congratulate members on their wise choice of a Council. The work of the Council absorbs a lot of time, study, and knowledge; we can also congratulate the Council on their choice of a leader. During the last two years we have been navigated in the proper course. It is very gratifying to read the list of prizes and awards, and the Lloyd's Register Scholarships ought to be a great attraction to the coming young men, and I know our Secretary has always laboured towards this end. The attendances at lectures appear to have been good. I have not been able to be present very often myself, but I have always followed up the Transactions and noticed how this Institute is keeping abreast of the times,