SESSION



1918-19.

President: J. T. MILTON, Fsq.

# Minutes of Proceedings

AT THE

# Annual Meeting

ON FRIDAY, MARCH 28th, 1919, AT 7 p.m.

CHAIRMAN: THE PRESIDENT.

The CHAIRMAN: Cur first business this evening is to consider the proposed alterations to the By-Laws.

Mr. J. CLARK: The following is the notice issued to members in December, with the proposed alterations to the By-Laws relating to membership, and I now submit these to the meeting.

Modification and Alteration of By-Laws.—It is proposed that the By-laws relating to the qualifications of Candidates for admission to the various Grades of Membership be altered as follows:—

Subject to the qualifications, furnished by the Candidate for election, being deemed satisfactory by the Council for the particular Grade of Membership applied for, the following Regulations shall hold good:—

Members.—Engineers holding First-Class Seagoing Certificates or those holding responsible positions and engaged in the science or practice of Engineering or Shipbuilding.

Associate Members.—Engineers holding Second-Class Seagoing Certificates or those holding qualifying positions and engaged in the science or practice of Engineering or Shipbuilding.

Associates.—Must not be under 21 years of age and engaged in the science or practice of Engineering or Shipbuilding.

Graduates.—Those receiving training in the science or practice of Engineering or Shipbuilding and have completed one year of such training.

STUDENT GRADUATES.—Those who have attended classes at a Technical College or School for at least one year and are training for the science or practice of Engineering or Shipbuilding and pass the examination standard prescribed by the Institute.

Companions.—Those holding positions in Trade or Commerce, and engaged in connection with the Engineering or Shipbuilding Industry.

Mr. Clark (continuing): I have been entrusted by your Council with the duty of putting before you for approval the proposed alterations which embrace the alterations regarding the qualifications of all candidates for admission and I feel sure all present will commend the progressive spirit which is shown. It will not follow that our Institute will become less of an Institute of Marine Engineers, indeed I will go further and say that those amongst our members who are not purely marine engineers have been as loyal to the Institute as if they had been, and have made its aims and objects their very own.

This is not merely an opinion, but is the outcome of past experience, and if we need anything to help us to form a sound and wise decision now, surely there is nothing which should influence us more than past experience, it carries the greatest weight with us in everyday life and always with infallible accuracy. Our retiring President in his able address to us on 7th January pointed out some of the chief causes which have contributed to the advances made in marine engineering and clearly showed the interdependence of marine engineering with other branches of industry and science and in furtherance of this spirit which tends to promote the highest progress of the profession the Council deem the present time opportune to bring these other branches more closely into alliance with us by widening our laws controlling admission to the various grades of This is no sudden proposal, but is the unanimous opinion of the Council that it will make for the highest wellbeing of our Institute and is put forward after having had

mature consideration given to it many months ago. Ships are essential to the marine engineer, and surely the co-operation of the engineer with the shipbuilder is just as essential if the best results are to be realised. As Mr. Milton pointed out, shipbuilders and marine engineers have each advanced through the progress of the other and both have benefited by taking advantage of progress made in other industries. I do not think it possible for anything to be added to these extracts to strengthen or better the argument in favour of the proposal now before us. To confine an institution of the high standing of the Institute of Marine Engineers entirely to its designation is an anomaly at the present day, no other institution that I know of does so, and as a matter of fact neither do we, and the Council think that the time has now arrived when this should be more widely known, the alterations do not really alter the spirit of our rules governing admission now, but it is thought advisable to remove any possible misconception on the part of those qualified and eligible for admission who might interpret our rules to their own and our disadvantage.

Mr. B. P. Fielden: An excellent thing has been done by proposing to alter the qualifications, especially owing to present conditions, and I second the adoption of the resolution.

The Chairman: I put it to all present that these alterations have been proposed by the Council after due deliberation, and I believe it will be greatly to the advantage of the Institute if these alterations are carried into effect.

The proposed alterations were accepted unanimously.

Mr. FIELDEN: I now propose the adoption of the alteration in the By-Laws, which has been placed before the members by printed notification, and repeated in the March issue of our Transactions as follows:—

BOARD OF ADVISERS.—It is proposed to make the following modifications and alterations in the by-laws with a view to the election of Lord Pirrie, Lord Weir and James Denny, Esq., as a Board of Advisers to assist the Council on subjects of importance:—

ALTERATIONS TO BY-LAWS.

- 33. There may be a Board of Advisers numbering three elected annually by the Council at the first Council Meeting after the Annual General Meeting.
- 34. The Board of Advisers may be elected from the Members and Hon. Members of the Institute.

Mr. FIELDEN: You will notice the three names proposed—Lord Pirrie, Lord Weir and Mr. James Denny have been asked to act as advisers to the Institute in any pressing matters on which the Institute wish to consult them. There are many questions in connection with the property and funds of the Institute on which the Council might like to have expert advice, and it will be a great advantage to the Institute to have the three gentlemen proposed to act as advisers, and I have therefore great pleasure in proposing the adoption of the clauses.

Mr. Clark: I have great pleasure in seconding the motion and I think the Institute are very fortunate in securing the services of these three gentlemen.

Mr. George Adams: There is one point on which I should like to be informed; are we to understand that these gentlemen take upon themselves the offices usually assigned to trustees?

The Hon. Secretary: I may explain that it was first of all proposed to ask these gentlemen to accept the office of trustees, but on seeking legal advice, we were informed that in this case it would be necessary for the trustees to take upon themselves the powers now invested in the Council and perform their work. In these circumstances we proposed to make a change and substitute the word "adviser" for that of trustee."

Mr. G. Adams: Thank you—this explains the matter quite satisfactorily and I heartily approve of the proposal.

The CHAIRMAN: I take it that the advisers will be elected by the Council in the same way as Vice-Presidents and will retire from office and be eligible for re-election in the same way.

The Hon. Secretary: That is so.

Mr. A. H. Mather: The proposed alteration is merely a modification of the clause already existing in the By-Laws. According to this By-Law the Board of Advisers may consist of 12 members; it is now proposed to limit the number to three. As the Institute has a considerable property to deal with, the Council would like to have expert advice on some questions, especially as regards finance, and therefore decided on this Board of Advisers. The first proposal was that Trustees should be appointed; but it was found that the Board of Advisers met the case absolutely.

Mr. Ross: Are the functions of the Board of Advisers general or only financial?

Mr. MATHER: It may advise on any general question, but the main point is the financial one. I may add that these gentle-

men have already been consulted on a very important matter—that relating to the purchase of the leasehold—and that they gave their advice readily and willingly.

The CHAIRMAN: I put this resolution to the meeting.

It was passed unanimously.

The CHAIRMAN: The Hon. Secretary will now read the Annual Report.

Annual Report.

THE Session which closed on January 31st, 1919, has been a progressive one, containing several events of interest. The proclamation of the Armistice brought to an end the anxieties attaching to thoughts as to the safety of our members serving their country on land and sea.

The gracious acceptance on the part of His Majesty the King of the office of Patron was a pleasing tribute to the work of the Institute.

The consent of Lord Pirrie, of Lord Weir, and of Mr. James Denny to act as Advisories under a designation to conform with the legal technicalities and by-laws was also a testimony of regard which was very acceptable.

There are other features of note to be referred to in detail in the body of our Annual Report of more than passing interest, so that on the whole we have reason to look back with satisfaction on the past and to look forward with hearty anticipation of what lies ahead beckoning us to make use of our opportunities.

MEMBERSHIP.—Our Membership Roll has been increased by the proportion indicated in the undermentioned summary.

MEMBERSHIP.	Jan. 31, 1918.	Tran from	sfers to	Elected.	Died.	Re- signed.	Lapsed.	Jan. 31, 1919.
Past Presidents (Non Members), Hon. Vice Presidents and Hor	9-							
Members	. 12	_	-	2		-	-	14
Members	. 1,451	-	10	161	25	-	10	1,587
Associate Members .	. 95	6	8	16	2		_	111
Associates	. 50	5	2	9	1	_		55
Graduates	. 54	9 .	-	10	1	_	-	54
Companions	77	_	-	5	. 1	_	_	81
Totals	1,739	20	20	203	30		10	1,902

The net increase is thus 163. Fifteen applications were received during January, and these were dealt with at the Council Meeting in February, 1919, along with others subsequently received, so that the roll is being added to steadily. We have to record the deaths of 30 off our Membership Roll; several of these were due to enemy action, and their names are placed on our Roll of Honour. We express anew our regret and sympathy with the relatives of the departed.

The meetings which have been held in the premises during the session are given in the tabulated form. It may be noted that the largest audience was on the occasion when a film was shown illustrating the "manufacture of steel," thus indicating the interest added by an ocular demonstration of the subject.

The number of visitors to the premises has been increasing and welcome has been given to many from over the seas.

AWARDS.—It has been arranged to revive the examinations of candidates for the Lloyd's Register Scholarships, held in abeyance during war conditions, which debarred some who were otherwise eligible from entering, owing to the call responded to by them for national service, and special consideration will be given to such in respect of the age limit, and possibly an additional Scholarship. It is with pleasure and cordial thanks to the Committee of Lloyds Register that we now intimate that the value of the Scholarships has been raised from £50 to £100 per annum.

Two papers were received for the Sir Archibald Denny Award from "Olympus" and "Entente," and one for the John I. Jacobs' Memorial from "Perseverance." These are being carefully considered by the Committee, and the result will be reported to the Council, after which the announcement as to the awards will be given.

The subjects for next Session have been announced for the various awards and the titles of these are the same as last year.

A new feature has been introduced to grant certificates to engineering pupils or apprentices who pass a prescribed examination, the aim in view being to encourage those in their years of early training to devote attention to educational facilities and direct them to the advantages afforded by the Institute of getting into touch with Marine Engineering while preparing for sea service in the workshop.

ISSUE OF TRANSACTIONS.—The monthly issues have been maintained, but at a much greater cost, on account of the

increased prices which have ruled for printing and binding, and it has been satisfactory to receive many appreciative letters on the subject of the Transactions. The advertisement section has been increased and additional applications for space are

pending.

LIBRARY AND READING ROOM.—The papers and magazines for the Reading Room as per accompanying list, have been increased during the year, and more visitors have taken advantage of the use of the premises and the facilities for study and reference on technical subjects. The list of additional volumes supplied to the Library is appended. Attention may here be called to inquiries received and responded to re concrete for vessels and buildings; also, re the Internal Combustion Engine.

PAPERS.—The papers contributed have been of interest and value, giving opportunity for discussion to the advantage of all, and our thanks are accorded to the members who kindly devoted time and attention to the preparation of papers. Contributions

by correspondence have also been much appreciated.

#### LIST OF PAPERS READ.

DATE			
1918.	SUBJECT.	AUTHOR.	CHAIRMAN.
Feb. 12th	Retirement Provision for Marine Engineers	W. W. Houfe (Member)	Jas. Paterson. (Member).
Mar. 12th	Boiler and Other Repairs by Electric Welding	R. S. KENNEDY	Jas. Shanks. (Chairman of Council).
April 2nd	The Storage of Bituminous Coal with Reference to its Liability to Spontaneous Combustion in	,	
	Storage Heaps and Bunkers	(Member)	(Member of Council).
	Boat Lowering Appliances	(Member)	(Member of Council).
Sept. 10th	Sediment in Marine Boilers	W. R. Austin (Member)	B. P. FIELDEN. (Vice-Chairman of Council).
Oct. 8th	Feeding and Circulating the Water in Steam Boilers	John Watson (Member)	J. THOM. (Member of Council).
Nov. 5th	Boiler Heating Surface—What is its true Value ?	G. J. Wells (Member)	Jas. Shanks. (Chairman of Council).
1919.		m - D	
	President's Address	The PRESIDENT	D Francisco
Jan. 21st	The Air Supply to Boiler R	(Member)	(Vice-Chairman

of Council).

PROPERTY.—The premises fortunately escaped free from air-raids, although much damage was done in the vicinity, and some of our meetings were disturbed. As a result of the air commotion and concussion, dust was lodged on the ceiling and walls so that it was necessary to apply cleaning operations, which, when carried out, effected a considerably improved appearance to the rooms and Lecture Hall.

REDEMPTION OF PREMISES COST.—In order to make provision for the redemption of the cost of the premises, £10,000, at the expiry of the 99 years' lease, an arrangement was entered into with the Royal Exchange Assurance Company and a policy effected by a single payment of £510 16s. 8d., with a proviso to recover on due notice according to a certain ratio, should such be considered desirable at any future time. We have received notice that the ground rent for the term of the leasehold is to be sold by auction, and the question of purchasing it is under consideration.

ACCOMMODATION GRANTED.—The Association of Engineering and Shipbuilding Draughtsmen have been granted the use of the premises for their meetings, to which our members are invited, as per the notices in our monthly issues. The lecture on the "Manufacture of Steel," previously referred to, was under this arrangement. The Surveyors' Association has also been granted the use of the premises for their meetings held on the first Saturday of each month, when papers are read and discussed. Donations are given to our General Fund by the respective Associations to cover the expenses involved.

STRATFORD PROPERTY.—The property at Stratford is still in the occupation of the same tenants. During the year a few repairs and improvements have been made to suit their requirements.

JUNIOR SECTION.—As the basement of the premises will soon be free from the occupation of the City of London Volunteers, it has been suggested to utilise it specially for the Junior Section; part being devoted to testing apparatus, part to accommodation for study, and part to recreation, athletics, etc., according to requirements and possible developments.

RECIPROCITY.—Correspondence was opened with the various Technical Societies throughout the kingdom with a view to a closer harmony of our similar interests, so that members might get into closer touch and receive advantages of the Reading Rooms and Libraries on introductory notes. The proposal was favourably entertained, so that any member desirous

of taking advantage of this may apply for the introduction to a Technical Society in his neighbourhood.

TITANIC ENGINEERING STAFF MEMORIAL FUND.—It will be seen from the Balance Sheet how the interest from the Fund and the donations were utilised. Two children of an engineer, who was lost in the *Titanic*, were placed in the Royal Merchant Seamen's Orphanage. Mrs. Noyce, widow of an engineer whose ship was in the list as "missing," received a grant; she has two sons who are not yet able to maintain the household. A donation was given to the Leinster Fund, and an offer was made to place children of any of the engineering staff—whose fathers were lost—in an Orphanage. The Lord Mayor's appeal on behalf of the Red Cross Society was attended to and subscriptions received for the Lord Mayor's Fund were forwarded to the Treasurer direct.

The following notice was sent to some of the papers, and is here reproduced for the general information:—

TITANIC ENGINEERING STAFF MEMORIAL.—This Memorial was formed in connection with the Institute of Marine Engineers, shortly after the *Titanic* was lost by collision with an iceberg, when the whole of the Engineers were drowned at the post of duty. In appreciation of their devotion, a Memorial Fund was established, and a capital formed, the interest accruing from which, supplemented by donations, is used to assist the widows and orphans of Engineers who have been left dependent on the kindly help of the sympathetic few who can give of their abundance and of the willing many who can spare from the portion laid aside periodically for works of benevolence. Annual donations from the Fund in question are given to well-established Orphanages and Institutions through whose instrumentality 40 to 50 orphans have been boarded and trained for work, on the recommendation of, or placing direct by the Institute, while help to the widows has also been bestowed. During the past year, two children of one of the junior Engineers of the *Titanic* were placed direct by special donation in the Royal Merchant Seamen's Orphanage. donation was also given to the "Leinster Fund" for the relief of the dependents of the Engine Room Staff who were lost when the Leinster was sunk by enemy action. The Committee whose special duty it is to consider cases and administer the Fund, is always willing and ready to help

in the manner indicated, and those who are inclined to supplement the fund at disposal will be welcomed as supporters.

CONFERENCES.—Close touch, by means of our representatives, has been maintained with various Committees, whose operations are of value to our members. The Committees are as follows:—

Advisory Committee, Board of Trade; Research Committee, Institute of Metals; British Marine Engineering Design and Construction Committee; Engineering Training Organisation Committee; Patents' Act Amendment Committee; Shipping, Engineering and Machinery Exhibition.

SOCIAL EVENTS.—The Annual Dinner and other Social Events have been held in abeyance during the war. It is recommended that the Dinner should be held during 1919, on a date convenient for the new President, and suggestions are invited as to this and other matters of a social character which formerly held place in our operations.

EXTENSION OF MEMBERSHIP.—Owing to applications having been made to members by friends in allied industries, and in order to widen the scope of our membership to embrace such, also to admit Marine Engineers to the membership when they attain the First-Class Sea-going Certificate, the proposed alterations in the By-Laws were submitted to the meeting for ratification or amendment as may be considered necessary. A General Meeting will be held at 6 p.m. on Friday, April 11th, to confirm the resolutions passed to-night.

## On behalf of the Council,

JAS. ADAMSON,

Hon. Secretary.

## FINANCIAL REPORT.

The Hon. Treasurer: I now submit the Balance Sheet and will read the report of Messrs. West and Drake, chartered accountants:—

We have to report that we have examined and checked the Accounts of your Institute for the year ended 31st January, 1919.

The Revenue Account shows a profit of £22 ls. 2½d., against a loss last year of £59 l9s. 2½d., a difference of £82 0s. 5d.

The Gross Revenue for the year is £2,374 9s. 1d., an increase of £594 18s. 7d., made up of the following increases:

								Increase.			
							£	8.	d.		
Subscriptions							75	16	9		
†Entrance Fees							66	2	10		
Interest							14	5	4		
Transactions Sect	ion						0	18	5		
Advertisements							285	17	3		
Rent Receivable	(Stratf	ord Pr	operty)				9	2	6		
Special Donations							142	15	6		
			Increase				£591	18	7		

†A proportion of the entrance fees have this year been allocated to Revenue, in accordance with the by-laws. There is a gratifying increase in the amount received on account of advertising. The Special Donations include one of £61 from Capt. R. H. Green, R.D.C., and £50 from the City of London Volunteers.

The expenses charged to Revenue amount to £2,362 7s. 10½d, as compared with £1,839 9s. 8½d. a year ago, an increase of £512 18s. 2d. made up as follows:—

				D	Decrea		ases. Increases.		
					£	s. d.	£	s.	d.
General Expenses							121	6	13
Dank Town Dates sto					-		22	14	1
LI A				17	0	9			
Stratford Property				7	11	6		_	
To assess as						_	10	2	3
D. Jin or D.				23	12	31		_	
Dinas Diamerican de						- 2	405	6	7
Tutomost					-		5	17	()
Depreciation-Furniture				49	3	11		_	
Do. Electric Fitt	ings			7	15	9		_	
Tanal Emmana				i	4	6		_	
Donation-Lady Jellicoe's				5	5	0		_	
Repairs and Redecoration of					_		63	16	11
Transactions Section				3	14	1	-	_	
				£115	7	01	£628	5 1	11
				£110	7	$9\frac{1}{2}$	115	7	91
	In	crease					£512	10	2
	111	crease					2012	10	2

The increase in expenses—£512 18s. 2d., taken from the increase in Revenue—£594 18s. 7d., gives the figure £82 0s. 5d. mentioned in the second paragraph. There is again a large increase in the items—Papers, Discussions, etc.—due to the cost of printing greatly advanced during the year under review. The honorarium of £157 10s. 0d. to the Honorary Secretary is included in the General Expenses. An amount of £5 has been charged to interest on account of the John I. Jacobs Memorial Award which appears in the Balance She+t for the first time. On account of the enhanced value of furniture and fittings the Council have decided that no depreciation be charged this year to these accounts. During the year the General Fund Investments were increased by £200—2½ Consols, and £200 5½ War Loan 1929/47. In accordance with instructions received we have valued the General Fund Investments and the Titunic Fund Investments as at the 31st January, 1919. The depreciation on the former amounts to £648 18s. 0d., and has been

written off the accumulated Revenue, and on the latter to £691 10s. 6d., which has been written off the Revenue Account of that fund. The £200 5% War Loan 1929/47 appearing last year under Building Fund Investments has been sold, and £200 has been withdrawn from the Deposit Account at the Bank.

In order to provide for the redemption of the expenditure on the City premises at the expiration of the lease a single payment has been made to the Royal Exchange Assurance Company of £510 15s. 8d. securing the repayment by them of £10,000 in the year 2011. The policy can be surrendered at any time on terms agreed with the Company.

Donations during the year to the City Premises Fund amounted to £27 2s. 0d.

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 to us and as shown by the books of the Institute.

Yours faithfully,

WEST & DRAKE.

Chartered Accountants.

One of the points emphasised is the increased cost of transactions, £400 greater than last year; this is mainly due to the increased cost of paper, blocks for illustrations and printing.

There has been a good advance in entrance fees, subscriptions, and advertisements—now a valuable source of revenue.

The valuation of investments has been made up to date and the actual value now stands at £2.648 18s.

The Redemption Fund, referred to at last annual meeting has been dealt with; several quotations were received from standard assurance societies, and that of the Royal Exchange Assurance Co. was accepted as the best. This appears in the Balance Sheet this year, and will appear each year in the assets of the Institute; the two items, i.e., the sum paid and the value insured will appear in the future side by side as the chartered accountants consider that this will show to the members the increase of the one and the decrease of the other; the decrease is of course in the value of the premises themselves, which will disappear entirely in 2011.

The *Titanic* Engineering Staff Memorial Fund shows a balance against the revenue account, but the amount to the credit of the Fund last year added gives a credit balance. The revenue account shows the actual receipts and the actual expenditure for 1918-19. Donations to the Fund have increased, and there is £80 on deposit, which is available, and can be used when wanted at any time; with this there is a credit balance also on the current account of £22 2s. 9d.