

INSTITUTE OF MARINE ENGINEERS

INCORPORATED

SESSION



1909-1910

Opening Meeting and Presentation of Awards.

Monday, September 27, 1909.

CHAIRMAN : MR. ALEXANDER BOYLE, VICE-PRESIDENT.

CHAIRMAN : On this, the opening meeting of the Winter Session, I should like to congratulate the members on the very attractive syllabus of papers to be read and discussions which are to take place. On looking down the list I notice that what might be called the more social side of the work of the Institute, that is to say, the bringing of the members together for social intercourse, has not been by any means neglected. In addition to our Annual Dinner, there is, I see, a Dance, Bohemian Concerts and the Annual Ball, so that I think all tastes are provided for. This is as it should be, for a great many of our members, by the exigencies of their calling, have very little opportunity of meeting in social intercourse, and it is very satisfactory, I think, that the Institute should provide occasions for this purpose. The Saturday afternoon visits to places of interest are also, I consider, a very useful and instructive side of the work of the Institute.

With regard to the papers and discussions which are given in detail on this card, and likewise to the papers read during the last session, I think the Institute may congratulate itself on maintaining its reputation for producing sound, practical,

up-to-date papers on engineering subjects of the present day, and we may also feel gratified to know that the objects for which the Institute was founded, that is, to increase the sum of engineering knowledge and to give an opportunity to members of communicating their ideas and experiences to fellow-members for the benefit of all, are being successfully attained.

I will not detain you longer, but I feel I cannot omit alluding to the great loss we have to deplore in the death of our President, Mr. James Dixon, Chairman of Lloyd's Register of Shipping. Mr. Dixon was a warm friend of the Institute, and was instrumental in endowing it with the means for providing two valuable scholarships. I have no doubt our Honorary Secretary will refer to the sad occurrence in the proper place and in proper terms, but I would like to say that the name of Mr. Dixon will be held in great esteem by the members of the Institute, and his valuable services recorded in its Transactions.

I have now pleasure in calling upon Mr. Adamson to give his statement of the work done since the Annual Meeting.

The HON. SECRETARY then gave his statement as follows—
At the reopening of our meetings for the winter session in our own premises, our thoughts naturally turn to special family matters, and we are led to reflect upon the happenings which have closely affected the inner work of the Institute. The unhappy event which at once deprived us, and a large circle beyond, of one whom we had learned to look upon as a man to be esteemed and respected for his sterling worth, is the first which claims our attention, not only on account of the sorrowful regrets it evokes, but of the necessity which has arisen to refill for the first time in the history of the Institute the Presidential chair, owing to the death of the President during his year of office. To meet this necessity the Council decided to appeal to the immediate Past President, Mr. James Denny, to occupy the chair till the end of the session. This wish has been happily acceded to by Mr. Denny, who will thus endorse Certificates of Membership and preside at the annual dinner arranged to take place on November 3. It is pleasing to know that the sudden illness which caused a loss in the deliberations of the Council for a time of the valued services of Mr. P. T. Campbell has been overcome. He is now convalescent and hopes soon to be able to resume duty. It is a matter of regret that the

Convener of the Dinner Committee is laid aside by illness, from which, however, we are glad to note, he is recovering, and we hope to see him in his accustomed place at the annual event, meantime the initial arrangements are in the hands of the Committee to carry out, pending the recovery of Mr. W. I. Taylor to that complete health and strength which is sincerely desired.

The reference in our last Annual Report to the increasing membership during last year may now be repeated for the current year, as the ratio of increase has been fully maintained and is advancing progressively, a feature which cannot but be satisfactory both to the Council and the members of the Institute. The additions made since January 31 consist of 145 members, 3 associate members, 2 associates, 11 graduates, 18 companions, making a total of 179 elected.

The papers submitted have been on subjects of interest and value both to members and to marine engineers generally, so much so that it ought to be an incentive—as it would appear to be from the increasing membership—to all marine engineers to associate themselves with the Institute.

The visits paid during the summer recess have been of educational value as well as productive of pleasant intercourse, embracing as they have done opportunities of seeing the details of internal combustion engines in course of manufacture; the finished works of the potter, also the artistic designs and devices connected therewith; the testing instruments and apparatus, with all the excellent appliances at the National Physical Laboratory, for scientific research; the old historical records, models and paintings in the Trinity House at Tower-hill; and the varied attractions of the Exhibition at Shepherd's Bush, where the Institute is represented by a few exhibits.

Now that we are about to face the winter session, the Council desires to bid you welcome to our opening meeting, and to express the wish that the attendances during the session may be all we hope for and desire, to hear the papers which are being prepared, to take part in the discussions, and to generally take a keen interest in the progress of the work which is before us on the programme. Not only are members preparing papers and food for discussion, but there are matters which appeal to other aspects of engineering life awaiting opportunity of development, while there are also social events interposed to relieve the tedium of the exacting strain of everyday work. It has

been said, and recently repeated, as if it were the utterance of a cynic, that more education means more misery. It seems to me that there is something in the words that savours more of wisdom than of cynicism in respect to certain systems of education, but we are convinced that in respect to engineers and the special education pertaining to their business, the phrase may justly be transposed to read more education less misery, in connexion with the efficient carrying on of his duties, whether ashore or afloat. More and more it is being pressed home to us on all sides that an engineer must be educated as well as trained; he is confronted by problems in regard to the nature and treatment of materials, the intelligent use of stores to prevent their abuse, and the most economical methods of discipline and routine to attain the objects aimed at, to indeed make the shipowner's interests his own and treat his property as a part of the national wealth capitalized to advance the prosperity of the whole community.

It is not only a test of, but an incentive to gain, knowledge, to sit down and write a paper. The exercise provides a mental study which enables the writer to find out how much he knows, and stimulates him to acquire more; and it was considered advisable by the Council to offer awards to the associate members, associates and graduates, for papers on certain prescribed subjects. This was rendered possible by making use of the Stephen legacy interest and by the kind liberality of one of our members, Mr. Ritchie. It is a pleasing duty before us to-night to present the awards, in the shape of books and instruments, to the undernoted and for the subjects studied.

Associate Member.—Stephen Award for paper on "The Steam Turbine," awarded to "Uranus."

Associate.—Stephen Award for paper on "Feed Heating," awarded to "Enigne."

Graduate.—Ritchie Award for paper on "The Functions of the Air and Circulating Pumps," awarded to "Vacuum."

The Denny Gold Medal for the best paper in competition for the Medal submitted during session 1908-9 has been awarded to Mr. William P. Durtnall (Member) for his paper on "The Generation and Electrical Transmission of Power for Main Marine Propulsion and Speed Regulation," read in July, 1908.

The Lloyd's Register Scholarship has been gained this year by Mr. Frank Duncanson, Apprentice Engineer, of Sunderland. Since being awarded this Scholarship we have received intima-

tion that Mr. Duncanson has also been successful in obtaining a Whitworth Exhibition and a National Scholarship.

It will be noticed from the syllabus that the paper on "Refrigerating Installations," read at the Congress Hall at the Exhibition, has been arranged for discussion at the Society of Arts' Hall, Adelphi, by the courtesy of the Society of Arts. On this occasion the members of the Cold Storage and Ice Association have been invited, in order that the discussion may have a wider scope and thus be more profitable to a larger number of those whose work and business lie in the direction of providing frozen or chilled produce for the community in the best possible condition.

Negotiations are in progress for a course of lectures on subjects which have an immediate bearing on engineering details and matters affecting the business of an engineer. As soon as the negotiations are completed, the arrangements in detail will be announced, if possible, for the current year.

CHAIRMAN: In reference to what Mr. Adamson has said with regard to the presentation of the Denny Gold Medal to Mr. Durtnall for his paper on "The Generation and Electrical Transmission of Power for Main Marine Propulsion," a telegram has just been received which it may interest the members to hear:

"The artificer engineers and engine room artificers, Royal Navy Depôt, Chatham, appreciate granting of Denny Gold Medal to Mr. Durtnall for his paper on the Electrical Propulsion of Ships. His lectures have been greatly appreciated at Chatham E.R.A."

I have now a very pleasant duty to perform, one, in fact, which is the principal reason for my presence here to-night, to present the prizes to the successful competitors for the Stephen and Ritchie awards. As you are aware, and as Mr. Adamson has just mentioned, these awards were made possible through a legacy left by Mr. Stephen, one of our late members, and by a generous donation from Mr. A. Ritchie, one of our members at Hong-Kong. After due consideration it was decided by the Council that these amounts should be devoted to the purchase of prizes for the writers of the best essays on engineering subjects prescribed by a Committee. There are three prizes, one for the Associate Members, one for the Associates, and one for the Graduates. You will all have an

opportunity shortly of seeing the papers, which after careful consideration have been decided to be the best of their class, and I think you will agree that they exhibit no small order of ability. They are extremely interesting papers on practical subjects, subjects which it must have been very helpful for the younger members to endeavour to write upon.

In the grade of Associate Members, Mr. James S. Gander receives the prize for his paper on "The Turbine," a subject to which he has evidently given a great deal of thought.

The prize in the Associate grade is awarded to Mr. W. W. Adamson for a paper on "Feed Heating." I merely had time to scan the paper for a few moments, but it seemed to me to be one which would do any one credit to have written.

The prize for the Graduate section is awarded to Mr. Walter Smith, for his paper on "The Functions of the Air and Circulating Pumps," and I can say without the slightest exaggeration, that such a paper to have been written by a Graduate is very creditable to him indeed.

I am sure the recipients of these prizes will value them very highly, not only for their pecuniary cost, but likewise as an evidence of their success. Mr. Adamson has very forcibly and clearly mentioned in his statement that writing a paper is not only a test, but an incentive to gain knowledge. That is a remark which I heartily endorse. Any one who undertakes to write on a subject, even if he knows a good deal about it, finds there is great mental effort necessary to state his thoughts accurately, and at the same time in a manner that will enable the one who reads the paper to understand it quite clearly. In addition, the writer often finds that he has only a vague knowledge of some parts of the subject he thought he knew well, with the result that he is obliged to search up authorities, thus increasing his own knowledge, and at the same time making his experience the more valuable. There is also a broader aspect than the one we have been considering. We live in an age of very keen competition in all engineering matters throughout the world, which, so far as we can foresee, is likely to increase and become more severe as time goes on, and it seems to me that we, the members of this Institute of Marine Engineers and the Council who have decided to present these prizes, may feel gratified to some extent at the thought that we are doing something to assist this old country of ours to hold its own and maintain its pride of place. We

do not know what great benefits may arise in the future, as indeed they have in the past, through the agency of individual men, and when we throw open to our younger members the privileges of an Institute of this kind, and give them opportunities of writing papers on subjects connected with their profession, we do not know to what end these small beginnings may lead, and the service we are rendering to the nation at large may be much greater than we imagine in promoting opportunities of education, which may bring great results in after years.

Mr. Boyle then handed the prizes to the successful competitors, with the exception of Mr. W. W. Adamson, who was unable to be present.

CHAIRMAN : We must all feel a peculiar and personal pleasure in presenting one of these awards to the son of our esteemed Honorary Secretary. I need hardly tell you that these papers were read and decided upon under a *nom de plume*, so that those who adjudicated upon and considered the respective values of the papers had no knowledge of the names of the writers, and it must be very gratifying to Mr. Adamson that to his son should have been awarded this prize.

It has been a great pleasure to me to present the prizes, and to have an opportunity of saying a word to encourage the young men, for after all, the world depends on its young men. In my early days the question that I have before referred to, that of competition, was hardly ever thought of, and in marine engineering the British engineer stood almost alone. That condition of affairs, however, I am afraid, has passed away. When I went to sea it was rarely that one saw a steamer with a foreign flag ; even in foreign ports there were seldom any other than the British. Nowadays we are met everywhere by strong competition, planned and arranged, and every assistance given for that competition. Britain grew great by her foreign possessions and her foreign trade, and other nations do not see why they should not have a share of that trade—and perhaps ultimately of those foreign possessions. At any rate, our position was won by engineers of a generation now passed away, and what was good enough for an engineer of forty years ago will not serve to-day. Most of them were good, practical, hard-working, shrewd men, but they had not the technical knowledge absolutely necessary in

these days, and it is upon the young men now taking their places that we must depend to hold their own by keeping abreast of the latest discoveries. Whatever problems may arise in the future these young men must rise to them and master them as their fathers and grandfathers did in their day.

Mr. J. G. HAWTHORN (Hon. Minute Secretary) : I should like to endorse our Chairman's remarks with respect to the procedure in awarding the prizes. As a member of the Awards Committee, it has been my pleasure and duty to go carefully through these papers contributed by the young men. Each paper was written under a *nom de plume* and I did not myself know, nor did my fellow members on the Committee, who the writers of the papers were. They were judged entirely on their merits, and, speaking from twenty-five years' experience of teaching, I would say that, coming from working young men serving, or just after completing their apprenticeship, I have never read better papers. It has given me very great pleasure indeed to see that we have young members in the Institute who can do so well.

Mr. D. HULME (Member of Council) : Our Chairman spoke of his early engineering experience and of the days when nearly all steamers carried the British flag, and I am very pleased indeed to see this presentation to the young men, for having studied hard to make themselves to some extent, masters of the theory of engineering. When Mr. Macfarlane Gray was with Messrs. George Forrester & Co., of Liverpool, I served my apprenticeship in their works, and I remember that I was obliged to complain to him of not being able to attend the lectures due to working so much overtime. My business also brought me into touch with our Chairman when he was a chief engineer, and I am glad to see that two of the young fellows who have taken prizes to-night have been under my supervision for their practical experience in the firm with which I am connected.

Papers on "Hydraulic Cargo Gear for Passenger Steamers" by Mr. A. M. McAllister (Member), and "Water Hammer" by Mr. Bishop M. King (Member), were then read by the Hon. Secretary in the unavoidable absence of both of these gentlemen, and after a short discussion, it was decided that the dis-

cussion be adjourned. These papers and discussions will be contained in the succeeding issue of the Transactions.

The meeting was brought to a close with hearty votes of thanks accorded to the writers of the papers and to the Chairman.

