

INSTITUTE OF MARINE ENGINEERS
INCORPORATED.

SESSION



1900-1901.

President—COLONEL JOHN M. DENNY, M.P.

REPORTS
OF THE
ANNUAL DINNERS

HELD AT

THE HOLBORN RESTAURANT,

ON

WEDNESDAY, OCTOBER 17th, 1900,

AND AT

THE PARK HALL CARDIFF

(BRISTOL CHANNEL CENTRE),

ON

SATURDAY, OCTOBER 27th, 1900.

INSTITUTE OF MARINE ENGINEERS INCORPORATED.

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President—COL. JOHN M. DENNY, M.P.

TENTH ANNUAL DINNER.

THE tenth annual dinner was held on Wednesday, October 17, 1900, in the King's Hall at the Holborn Restaurant. The President (Col. J. M. Denny, M.P.) occupied the chair, and was supported by the following guests: Sir. Wm. Peace, K.C.M.G. (Agent-General for Natal), Mr. W. G. Ellison Macartney, M.P. (Secretary of the Admiralty), Commander R. Kawashima (Imperial Japanese Navy), Right Hon. W. J. Pirrie, Mr. W. J. Howell (Assistant Secretary Board of Trade), Mr. Jos. A. Smith, R.N., Captain Wilson (Board of Trade), Sir John Gunn (President Bristol Channel Centre), Messrs. J. G. S. Anderson, John Bell, J. Corry, A. S. Williams, Captain Chalmers, Messrs. Wm. Lund, E. G. A. Pembroke, J. T. Milton (Lloyd's Register), T. B. Robinson, R. Green, O. R. Doherty, Lieut.-Colonel Arch. Denny, Mr. D. J. Dunlop, Mr. P. A. Denny, Mr. W. Risk, Mr. M.

Paul, Mr. H. J. Cornish (Lloyd's Register), and Mr. George Sloggett (Hon. Secretary Bristol Channel Centre). There were also present from the Bristol Channel Centre Messrs. M. W. Aisbitt, T. W. Wailes, J. Boddy (Vice-Presidents Bristol Channel Centre), A. E. Smithson (Hon. Treasurer), T. A. Reed (representative of council), H. Radcliffe, J.P., J. Shearman, J. Fleming, Chas. Jones, W. Jones, and T. Dunn (members).

TOAST, "THE QUEEN."

The PRESIDENT, who on rising to commence the toast list was accorded a very hearty greeting, said: Gentlemen,—The first toast on the list is "The Queen." I give you the health of Her Most Gracious Majesty the Queen—the wisest sovereign, the most popular lady, and the truest woman in the world.

("GOD SAVE THE QUEEN.")

TOAST, "THE ROYAL FAMILY."

The PRESIDENT: In the first toast we honoured the head of this kingdom—the head of the Royal Family. I have now to ask you to respond to the toast of the Prince and Princess of Wales and the other members of the Royal Family. We are all pleased to know that there are many of them. There are three potential sovereigns at least among them. At the present time there are four generations in the direct line—the Queen, the Prince of Wales, the Duke of York, and the Duke of York's son. In the members of the Royal Family we have those who never shirk a duty, and who show their country how lives ought to be lived.

("GOD BLESS THE PRINCE OF WALES.")

TOAST, "THE IMPERIAL FORCES."

The Right Hon. W. J. PIRRIE proposed "The Imperial Forces," and said that in the absence of Sir Thomas Sutherland, who was to have discharged the duty, he had great pleasure in proposing this toast. It was a toast which any gentleman in the room might be delighted and

gratified to submit, having regard to the wonderful work that had been accomplished during the past year by the Imperial Forces of the Crown. To him, as an Irishman, it was very gratifying to feel that whenever England required an important man to fight any great battle it sent out an Irishman, and he thought they would all be agreed that as a representative of the Irish race Lord Roberts had done his duty in South Africa. Lord Roberts had been well supported by French, by White, and also, he thought, by Lord Wolseley, who, though at home, had probably assisted very materially in the great Imperial work in hand. He much regretted that they did not seem to be able to point to so many Irishmen in the Navy. At the same time he might refer to Admiral Lord Charles Beresford as an Irishman of whom they were all proud, and as one who had done much towards popularising this great branch of Her Majesty's services. As a shipbuilder he regretted that they had no coal or iron in Ireland by means of which they could assist the Navy by constructing some of those great warships that were added to our fleet from time to time, but perhaps it was better for England that this was so. In connection with this toast of the Imperial Forces, he thought it would be unfair to the great shipowners of the country if he omitted to refer to the way in which they came forward and assisted not only the Admiralty, but also the War Office, in transporting some 200,000 men to South Africa as quickly as they could possibly be supplied. Their vessels took these troops out to South Africa without the loss of a single life, which was a record that the shipping interest and the country might reflect upon with pride, and if it had been necessary to transport double that number of men, the shipowners of the country would have been found fully equal to the task. The volunteers and the yeomanry had proved themselves most important elements in the Imperial Forces, although in this connection they had to regret that the Ulster Yeomanry, in

their eagerness to get at the enemy, unfortunately fell into a trap and were taken prisoners, so that the country was deprived of their services for many months during one of the most eventful and stirring periods of the war. He coupled with the toast the names of Mr. J. A. Smith for the Royal Navy, and Lieut.-Colonel Archibald Denny for the military forces.

Mr. J. A. SMITH, R.N., in returning thanks, said : Col. Denny and gentlemen,—The enthusiastic manner in which you have received the toast of “The Imperial Forces” makes it quite clear that the members of the Institute of Marine Engineers recognise the necessity for maintaining this great Empire by means of efficient, and sufficient, naval and military forces. During the recent war in South Africa the Navy has not had an opportunity of showing what it can do on its own element, but both in South Africa, and in China, the naval brigades which have been landed have very worthily upheld the honour of the service to which they belong. Whenever there has been hard fighting or hard work to be done, the seamen and marines, with their 4·7 and other guns, have always been to the front, and, besides always fighting well, they have also been distinguished for the good discipline and cheerfulness which they have maintained under all conditions. One of the naval brigades engaged in South Africa went to the front 530 strong, but after a very few months, when reviewed by Lord Roberts at Pretoria, that force had been reduced to 320. They had had over 200 casualties. Such a great number of casualties, among such a comparatively small force, in so short a time, is quite sufficient evidence of the hard work, and the hard fighting, that the men had been subjected to. Many of them had fallen at Graspan and other fights, and of them it may be said :

“They had fought for Queen and country,
Like valiant men and true,
And had only done their duty,
As such men are bound to do.”

An engineer officer in the Royal Navy went into Ladysmith a fairly robust man, weighing some 200 lb., but after being shot in the head and laid low with enteric fever and dysentery, he came out of Ladysmith weighing about 90 lb. And yet, I am told, he kept up a cheerful demeanour all through. When very low indeed he was asked how he felt, and he had just strength enough left to reply with a smile "jolly." He did not die for his country, but he left the greater part of himself—although not the nobler part—behind him. Before I sit down I should like to say a few words respecting the engineer officers of the Royal Naval Reserve, for if the British Empire is ever involved in a war which necessitates naval operations these officers will be at once called up, and it is unlikely that they will, as is sometimes supposed, be employed chiefly in mercantile auxiliary cruisers. In my opinion they will be at once appointed as part complement of the battleships and cruisers of the Royal Navy, and I have no doubt that the Admiralty had this in view when they determined, as they recently have done, to establish instructional classes at Devonport and Chatham on the same lines as the classes which have been held at Portsmouth, with the object of giving an opportunity to the engineer officers of the Royal Naval Reserve to become acquainted with the machinery of warships, including torpedoes and the hydraulic machinery for working heavy guns, and also to become familiar with the routine of naval discipline as applied to the engineering department. In future it is intended to hold three classes each year at Portsmouth, Devonport, and Chatham, instead of three classes at Portsmouth only, and to include assistant engineers. This will allow of the passing of fifty-four Royal Naval Reserve engineer officers each year through these instructional classes, instead of eighteen as heretofore, and an opportunity will be afforded for the whole body of Royal Naval Reserve Engineer officers to come into close touch with their brother officers of the Royal Navy. Of course the command of the sea

is the very breath of life to the Empire. We must hold the command of the sea, and that is a fact which is now well recognised by all governments. Our Navy, as we all know, has grown by leaps and bounds, but other nations have not been idle, and we know that some other Powers have made very strenuous and successful efforts to increase the strength of their own fleets. We read that the German fleet in Chinese waters is stronger than that of England. That ought not to be. We ought certainly not to be inferior to any European Power in any part of the globe. Next Saturday, in Trafalgar Square, we shall see the Navy League dress Nelson's Column with green garlands—not to taunt the nations whose fleets were destroyed by our famous admiral, but to keep green the memory of our forefathers who laid the foundations of this great Empire, and we shall all be told once again that "England expects every man to do his duty." Now every man includes every taxpayer, and if you have more ships and more men you want more money, and you cannot have more money without more taxes. I am afraid we shall have to submit to at least fourpence more on the income tax. We know that Parliament will grant whatever is asked for for the Navy. They have done so now for many years, and the nation has just spoken on the subject with no uncertain voice. If the result of the recent election means anything, it means that this Empire is not to stand still, that not only shall it be maintained at its highest pitch, but if necessary, as in the result of the South African war, that it shall be extended.

Lieut.-Colonel ARCHIBALD DENNY said he had often been called upon to reply for a third part of this toast, but never before had he been asked to reply for half of it. The old toast used to be "The Navy, Army and Reserve Forces," and he belonged to the last third—the Reserve Forces. But now the toast was put down as the "Imperial Forces,"

and he was asked to reply for the land forces. In the olden days the auxiliary forces were looked upon as a reserve to take up the duties of the regulars at home when the army was called away, but in the course of the present war we had found that the auxiliary forces had not been used only at home. We had found that all branches of the auxiliary or reserve forces—the yeomanry, the volunteers, and the militia—had also been used in South Africa, and more than that, we had found that England had received the very greatest assistance from our Colonial brethren who proffered their aid, not at a time when we were winning in battle, but when the fortunes of England appeared at their darkest. The native forces of the Empire were also only too anxious to come forward to our assistance, but that could not be allowed. With regard to the regular army, they had all read how gallantly our troops had fought in South Africa, and won their battles in the end. Previous to the present war the volunteers received less recognition than they thought they were entitled to, and none could say at the present time what would be their future, but of one thing they might all feel certain and that was that the volunteer service would not remain as it was. He believed that every man should do his duty and should serve his Queen and country in some form or other, and while he deplored conscription he thought that every man should be made to be a soldier—that is to say, if a man did not join the Navy or the Army he should be compelled to serve in the volunteers. Put differently, he thought the volunteers should have the pick, and that the regular army should have the rest. He also felt perfectly satisfied that in any crisis in our history every man who could not serve with his hands and his arms would serve with his purse, and they had seen an illustration of this in the present war. But the greatest thing that the war had done was to knit us together as an Empire, and he felt certain that the Anglo-Saxon race would always fulfil its destiny.

TOAST, "THE INSTITUTE OF MARINE ENGINEERS."

Mr. W. G. ELLISON MACARTNEY, M.P., said: Gentlemen, it was with very great diffidence that I assumed the responsibility of proposing this toast. Indeed, I would have much preferred that the honour should have been transferred to some one more capable than myself of doing the subject justice, and I would have asked your President to transfer the duty to another individual, had I not felt that in doing so I should have shown a small appreciation of his courtesy towards me. I frankly confess that with regard to most of the complicated and interesting problems discussed by the members of this Institute at their meetings my opinions are probably worth no more than those of "the man in the street," but to-night I shall not imitate that sagacious person, who not only forms very strong opinions but takes every opportunity of ventilating them. Whatever opinions I may hold upon the problems which occupy the attention of the marine engineering world at the present time I shall reserve them for my own private consideration, and in the position in which I find myself to-night I shall console myself behind the old adage which says that a Scotchman thinks before he speaks, and an Englishman thinks while he is speaking, but an Irishman speaks first and thinks afterwards. I will to-night take full advantage of my national birthright. I have, however, one claim which I modestly put forward for being entrusted with this toast, namely, that I am a sincere well-wisher of the marine engineer, whether he is employed in the Royal Navy or in the Mercantile Marine. I say this not only because I share with all my fellow-countrymen their admiration of this great profession, which continually exhibits the national qualities of perseverance, pluck and skill, but also because, in connection with that department of the State with which I have been associated, I have had many opportunities of forming a judgment of my own upon the important part which the marine engineer,

whether you look upon him as a theoretical expert, or a designer, or the person who is daily charged with the running of the machinery, plays in the material interests of the Empire. My friend, Mr. Pirrie, has already alluded to one point which I think illustrates what I have said. No one can look at what has been done in the last few months by the mercantile marine for the interests of the nation without feeling great admiration. The regularity with which the transports were despatched, the punctuality with which they arrived at their destination, and the almost absolute immunity from disaster, speaks volumes in my judgment, for the excellence of the machinery which was placed on board those vessels, and for the efficiency of the officers and men who were in charge of the running of that machinery. It is true that the great majority of those ships were not those leviathan racers whose records whet the edge of the appetites of the readers of our daily papers, but their performances were not the less important to the interests of the nation. Their reliability and their punctuality relieved enormously the anxieties which filled the official mind at that time, and did much to lessen the tension of those administrative details which the public do not know and have never realised in connection with this important work. Then as regards the question of speed which occupies the minds of many of our great marine engineers at the present day. In my short experience there has been what is tantamount to a revolution in the speed of cross channel passages—a revolution which is almost on the point of creating another Irish grievance, for I have heard the complaint from a fellow-countryman of mine that the passage from Kingstown to Holyhead hardly gives any respectable Irishman time to drink a moderate quantity of whisky and water. He would be a bold man who would place a limit of time upon our cross channel passages or upon the speed of our ocean or cross channel steamers, and I myself look forward to the time when my gallant friend in the chair and his competitors will hardly give passengers

an opportunity of being sea sick between Dover and Calais. Fortunately I have not to justify the existence of your Institute. If it had not been in existence for some years you would have been obliged to form an institute of the kind now, for this is an age of specialisation. Everybody is a specialist now, from members of Parliament to that limited body known as naval and military experts, and I feel sure that it is for the benefit of the nation, as it is for the benefit of all those who have to administer departments concerned with the mercantile marine, that those engaged in this most important profession should have opportunity of meeting together and placing their views before the public in concrete form, but if it has done nothing more than adorn the House of Commons with such an admirable example of the marine engineer as your President, the Institute has justified its existence. I have not the least doubt in my own mind that he is an Irishman. He says he is a Scotchman, and he believes he is a Scotchman, but that is entirely owing to the credulity of the Scottish race, and if I had time I have no doubt I could prove to you that what I say is correct. I ask you to join with me in wishing health and prosperity to the Institute of Marine Engineers. I am sure you will feel with me that its destinies for the present year are safe in the hands of your gallant chairman, and I have no doubt that in future years you will be able to find successors who will worthily fill the office which he now occupies.

The HON. SECRETARY (MR. JAMES ADAMSON), in responding, said: In this the brewing month of October, '88, the few words were spoken which led to the issue of a circular letter proposing the formation of the Institute of Marine Engineers. A meeting was summoned, but with somewhat disappointing results. However, it was determined to go forward, and, by the concentrated energy of the few, to make up for the apparent lack of interest on the part of the many. For that determination the whole community

has cause to be thankful, for the whole community has benefited by the prosperity of the Institute whose progress we are to-night most fittingly met to celebrate. I need not repeat what the aims and aspirations of the founders were; the results speak for themselves, and are patent to all. Their faith has become fruition, and has been justified in and by the work accomplished. Our one desire is to do good to all by encouraging every engineer to do his duty faithfully at all times, and to take advantage of such means as are placed within his reach of improving himself in everything that tends to progress and economy—not only so, but we seek to encourage him to commit his thoughts to speech and writing, thus testing the definiteness of his knowledge; or to contribute to the general good by detailing his experience and having brought to bear upon it in discussion the more or less ripened experience of others. Since the inauguration of the Institute we have read and discussed ninety-two papers, besides having lectures delivered on special subjects with a view to the spread of information tending to the advancement of marine engineering; and while it would be invidious to single out any one paper for special mention, I may say that the subject which is at present engaging attention at our ordinary meetings stands out as one for special consideration in the interests alike of shipowner, underwriter, and engineer. I refer to “propeller shafts,” the mortality among which has become very serious to the country. During the lifetime of the Institute many changes and improvements have been made in steamships and machinery. In order to cope with these it is necessary that those placed in charge should advance with the times, and there is no doubt that by means of papers, discussions and lectures the Institute has been helpful, not only to its members, but to marine engineers as a whole, in enabling them to keep pace with the builders, thus saving the shipowner from buying his experience too dearly. Our reading-room and library form excellent

means of self-improvement, and we endeavour as far as possible to make these useful and attractive to engineers of all grades, while our fees are so graduated as to give full encouragement to the juniors to join the membership and take advantage of the opportunities which such a society undoubtedly affords. The premises we occupy are our own freehold, and are furnished and fitted to suit the purpose in view. To one of our past presidents, the late esteemed and respected Dr. Denny, especially, among others, we are thankfully indebted for the financial encouragement given as a nucleus to enable us to purchase a habitation for ourselves, and we are gradually adding to it as occasion serves. Our balance-sheet shows the healthy condition of our finances, and while the objection may be made that, as a scientific society, we should not hoard the money but spend it year by year for the benefit of the members, we must husband some of our resources in order to meet exceptional expenditure in adding to our conveniences, as well as ministering to our necessities, present and prospective. Allow me in closing these brief remarks, in response to the well-wishing words of the proposer of this toast, to add that we have room for more members, and as our aims are essentially for the improvement of marine engineering and its exponents, every marine engineer ought to be encouraged to join the membership, and take advantage of the facilities offered to him of not only improving on his own experience and knowledge, but having the pleasing consciousness of assisting in the training and development of the juniors who are rising to assist in the battle-ground of commerce to maintain British supremacy and retain the ancient claim for Britain as "the mistress of the seas."

TOAST, "SHIPS, COLONIES AND COMMERCE."

Mr. WALTER J. HOWELL (Assistant Secretary Marine Department, Board of Trade): In the first place I thank you cordially for the honour you have

done me in asking me to propose so important a toast. It is a toast that is always of great interest in this country, but it is of special interest and significance at the present moment. Ships, colonies and commerce are mutual and inseparable. They are the means by which the little kingdom of England has been developed step by step into the great Empire of which we are so proud, and they are the means by which that Empire will be extended and sustained in the future. I feel, however, that it is not necessary for me to expatiate upon the importance of the subjects combined in the toast. As regards ships, one of our poets has said that "ships are but boards, their crews but sailor men." That is only partly true now, for ships are steel plates, and sails and sailors have been superseded to a great extent by triple and quadruple expansion engines and by skilled engineers. Of those engineers I hesitate to speak on such an occasion as this, but I believe that the country has no abler, more conscientious, or more gallant body of men than its marine engineers. Mr. Adamson has referred to the subject of propeller shafts and to the accidents which occasionally happen to them at sea. We all recognise the great skill, resource and perseverance so often displayed by engineers in dealing with these accidents and in carrying out repairs which have enabled the ships to reach port. Marine engineers deserve well of their country. As time goes on their status on board ship—already of the highest importance—cannot fail to continually improve, and I for one am glad that it should be so. Well, to return to our ships. Our sailing tonnage is still a great possession; but it is rapidly giving way before the more effective agent. The sailing tonnage built each year is becoming a negligible quantity. In fact, I believe that only three sailing vessels over 500 tons are now under construction in this country. It is, therefore, quite clear that steam tonnage is the carrying power of the present and the future, and I think we ought to be proud of the fact that of 22,000,000 tons of

steam tonnage (vessels above 100 tons gross) in the world, the British Empire owns over 12,000,000 tons. Much has been said lately of the growth of foreign steam tonnage. For instance, some people are alarmed because the proportion of the world's steam tonnage owned by Germany has grown from about 7 per cent. in 1890 to over 9 per cent. in 1900, while the proportion owned by the United Kingdom has fallen from 59 per cent. to 51 per cent; but it is consoling to remember that the actual increase of the United Kingdom steam tonnage in the ten years is 3,700,000 tons, whilst the entire steam tonnage owned by Germany in 1900 is only 2,160,000 tons. Besides, it is a fact that a very considerable amount of our cast-off steam tonnage is sold to foreigners, and that it is replaced by better and more modern vessels. Much trepidation, again, has been caused by the stride which the Germans have lately taken in the construction of large steamers. In 1899 Germany had nineteen steamers of 10,000 tons gross or upwards, while England had but nine; but now, while Germany still has only nineteen, England has twenty-three, and I believe thirteen more are under construction in this country. It is true that Germany still holds the record for speed, but, if our shipowners came to the conclusion that it is expedient to lower that record also, I am quite sure that we may rely upon our shipbuilders and engineers to enable them to do so. Before passing from ships to colonies I cannot refrain from referring to the splendid service recently rendered by the one to the other, and to the Empire generally, in the transport to South Africa and China of so many thousands of men without the loss of a single life. That is an achievement impossible to any other Power, and it is one of which the nation and our great mercantile marine has every reason to be proud. Now what can I say of our colonies that has not been said from hundreds of platforms during the past few weeks? We are proud of them. Their gallant soldiers have fought shoulder to shoulder with our own and have proved themselves

worthy brothers-in-arms indeed, for wherever there have been hard knocks to give or to take they have been in the forefront, and I trust the country will never forget the devotion and constancy they have shown. My position as a servant of the State forbids me to discuss politics, but I believe the colonies make no secret of their opinion, that never in their history has a wiser or more far-sighted policy been adopted towards our colonies than has been adopted in recent years, and we—and I hope they also—have the reward. The two states which have now been added to the Empire consist of about 168,000 square miles, or nearly three times as large as England and Wales, and, wisely administered, cannot fail to be valuable as outlets for our people and our commerce. And do not let us forget what that commerce is. It is the very life-blood of the nation. Taking the year 1899 (the latest complete year for which we have statistics), I find that the imports into this country amount in value to 485,000,000 of pounds sterling, the largest amount ever recorded in a single year. France and the United States between them sent us goods to the value of 173,000,000, and it is interesting to note that Australia (with 33,000,000 worth) comes next. Then let us take the exports of our own produce and manufactures. In 1899 these amounted in value to £264,000,000—again the largest amount ever known. And so far as the figures for nine months of this year go, they tell the same story; and it is again a record both as regards imports and exports. I think I may say that our trade and commerce, taken all round, was never in a more flourishing condition. This is our heritage. Is it not worth while to make every effort to retain it? I know your answer will be an emphatic “Yes.” But how shall we retain it? I think history supplies the answer. Let me remind you of what Lord Salisbury, in one of his recent speeches, said: “Remember what has happened to the great Maritime Powers of the past—to Holland, to

Spain, to Venice, and, if I might go into ancient times, to Carthage, and to Tyre. In every one case the great Maritime Power has been paralysed and killed, not by the disasters it may have suffered in its provinces or its outlying dependencies, but in every case it has suffered by the blow directed at the heart. That is a lesson which a Power like England ought not to neglect. As long as our heart is unstruck we may look with comparative indifference to the result of any war. If our distant provinces were affected we might do as we did in the Peninsula War—we might win them back again. But if our heart is struck there is at once an end to the history of England." Well, then, we must protect the heart and hold our Empire by taking care at all costs and in spite of everything to maintain our maritime supremacy, for it is the very foundation and corner-stone of our power, and if we lose that we lose all. I couple with the toast the names of Mr. J. G. S. Anderson, of the Orient Line, Sir Walter Peace, the Agent-General for Natal, and Mr. J. Corry.

Mr. J. G. S. ANDERSON, in responding, said he would first of all give expression to the satisfaction which he believed was felt by all present, including the visitors, at the account which the Honorary Secretary had given of the initiation and development of the Institute. Mr. Adamson had given them a most interesting account of the work that had been done—it had been well done and generous assistance had been given—and they saw before them that evening in the character of that important meeting a corroboration of what Mr. Adamson had told them of the success of the Institute. The duty which specially fell upon him (Mr. Anderson) in connection with this toast was to reply for the ships. Well, the importance of the shipping industry of the United Kingdom was universally acknowledged. There was no question about that, and yet they found perpetually from one quarter or

another some agitation or proposed legislation very much of the nature of an attack upon that interest which, in the opinion of practical shipowners would, if given effect to, injure it. He happened to have served for some years upon the committee of the General Shipowners' Society of London, and he might tell them that the time of that society to a considerable extent was taken up with repelling attacks of the sort he had spoken of. It would be in the recollection of most of them that some years ago a President of the Board of Trade, whose energy they all respected and admired—Mr. Chamberlain—in his desire to diminish the loss of life at sea, hit upon a plan which, in his opinion, would have that effect, and which, in the opinion of practical shipowners, would not have that effect, but would cause very serious injury to the shipping interest. Mr. Chamberlain's idea was to materially curtail the right of shipowners to insure their ships against the dangers of the sea. Then, again, there was another instance of that sort. There was an imposing institution known as the London Chamber of Commerce. They would expect an institution of that sort to foster a branch of commerce like the shipping industry, or, at all events, if they did not see their way to foster it and help it, they might leave it alone. Not at all. The Chamber of Commerce tried to introduce a compulsory measure to interfere with the freedom of a bill of lading contract by sea, and to throw upon the shipowner risks which from time immemorial had been taken by underwriters, who had established a business for that purpose, and taken a premium for those risks. Those two intended boons had each been devised in what he might call the house of a friend. Of course it was evident that the people in question had been simply wrong-headed in this thing. But if that happened in the house of a friend, he left them to conceive what a crowd of mischievous measures had been perpetually brought forward in Parliament with a view of applying nostrums to shipping, and which

the shipowners had managed to suppress in their earlier stages. He need not tell them that if those two attempts which had proved unsuccessful had succeeded, they would have had the effect of making the investing of money in ships under the British flag a much more risky matter. There was a popular idea that ships could be built without money—that was a mistake, money was needed—it need not necessarily be one's own money; it might be somebody else's; it generally was somebody else's. If the security was bad the money was difficult to get, and that would mean a curtailment of the splendid shipping industry of the United Kingdom. He did not claim for shipping any immunity from legislation—nothing of the sort. But what he did say was that they ought to have regard to the great success of the shipping industry of this country on its present lines and to its great importance to the country, whether in peace or in war—in the latter it was of vital importance—and it was no light thing to be perpetually tinkering and tampering with the foundations on which that great beneficent structure rested.

Sir WALTER PEACE said he felt it a great honour to be asked to address them that evening, especially with reference to the colonies. "Ships, Colonies and Commerce" was an old formula that reminded them of a time long past—a time before the marine engineers had turned their attention to the means of propelling ships at sea. The colonies, when this formula was adopted, were not thought of as they were now; they were originally looked upon as a property of the people of England, and were considered valuable mostly as dumping grounds for criminals or ne'er-do-wells, whom their relatives wanted to get rid of, or as places providing sinecures for the poor relatives of distinguished noblemen. But how differently did they estimate the colonies to-day? There had been no voice telling them to expect this great change, it had been working

steadily on, particularly during the last twenty years, until now the colonies were appreciated in a just and equitable manner by the people of this country. There had been politicians and statesmen enough—in fact he thought some of them still lived—whose only advice to the people of the colonies was to cut themselves adrift from the mother country or to advise the mother country to let the colonies go their own way. But where was the statesman who had come forward to prepare the people of this country to realise the meaning of the word Empire? There was one, the greatest statesman of all, if he might use the word, and that one who alone in her own person and by her own character had been the one link, the one influence, which had kept the Empire to this day, and that was their dearly beloved Sovereign and Queen. He had only one word to say about the South African war, and it was with reference to Her Majesty. Viewing that war as he did, not only as a necessity—a something we could not run away from if we would—but yet as the most dreadful but still imperative duty ever laid upon a nation, he was thankful to think that Her Majesty had been spared to see the day when her subjects had hurried to the flag from all quarters of the earth to fight shoulder to shoulder in one common cause. Those three words, Ships, Colonies, Commerce, could be expressed in one word—that one word that had been used again and again that night, and which would reverberate for many years in this country—that one word was “Empire.” But they knew very well that, however grand, noble, and philanthropic their sentiments might be, the Empire was something which could not be maintained on sentiment. He had no doubt that the gentleman who would speak about commerce would tell them that commercial and industrial men carried all other classes of the community on their backs, and he would be quite right in saying so. But Lord Rosebery recently made a speech in the House of Lords, where he said that the first duty of this

country at the present time was to put the Empire on a business basis. If Lord Rosebery had been a man of business he would have said, "Put that Empire on the basis of business." There was not very much difference in the words, but there might be a very great deal of difference in the meaning, and the institution and the profession to which they belonged held a front rank amongst the workers and of those who had got to build up and maintain and consolidate the British Empire. Who was it that Captain Kane appealed to in the harbour of Samoa when he was trying so gallantly to get the *Calliope* out of that gale? He had to go to the engine-room and the stoke-hole, and there he found the strength which saved him; and there they found the strength which to a very great extent they had to depend upon for the future preservation, not only of the British Empire, but especially to preserve the prosperity of England, which was at once the most valuable and the most vulnerable portion of the Empire. He perhaps might be allowed to allude to something which was said by Mr. Asquith at a meeting in Yorkshire a few days ago. He was referring to a statement by Mr. Chamberlain, who, of all Englishmen, had done more perhaps than any other to bind the mother country and the colonies together. Mr. Chamberlain had sent a telegram to some one telling him to place patriotism before politics, and Mr. Asquith said that politics should go before patriotism. He supposed that "politics" meant "party politics," and speaking as a Colonist he ventured to say that there was no surer way of bringing about the disintegration of the British Empire than to make the interests of the colonies the sport of political parties. As they were coming to the close of the nineteenth century and they found themselves with the tie between the mother country and the colonies closer, and they understood each other better to-day than they ever did before, they might ask themselves was there not in this fact a message which the old century bequeathed to the incoming one—a message

from the men of the nineteenth century to those of the twentieth century: "We have founded and built up a British Empire; see to it that you consolidate it, and with one life, one fleet, one flag, one throne, Britons hold your own."

Mr. J. CORRY also briefly replied, and speaking for commerce, said that although we held a very good position there were many rivals coming forward, and we could not hope to keep up our supremacy without strenuous efforts.

TOAST, "KINDRED INSTITUTIONS."

Sir JOHN GUNN (President of the Bristol Channel Centre) said that the toast which he had been asked to propose was one which he was sure would receive their cordial approval. It was that of "Kindred Institutions." He had been furnished with a list of some of these institutions, and he would simply name them. He would not dilate on the special functions or merits of these various institutions, which were familiar to most of those present, but he felt certain that when he mentioned the names of the distinguished institutions included on his list, they would all at once appreciate the importance of the admirable purpose which these institutions served in connection with the great business with which those present were all more or less associated. The first name on the list was the Institution of Civil Engineers—an honoured and distinguished institution. Then came the Mechanical Engineers, the North of England Shipbuilders and Engineers, the Engineers and Shipbuilders of Scotland, the Institution of Naval Architects, and last, but not least, the recent institutions, such as this one, which had been formed specially to promote the interests of what might be called perhaps the most important phase of their commercial life and position—that of marine engineers. It was a remarkable fact, and one of the peculiarities of our age, that during the last half of the present

century, as science and knowledge, and especially technical knowledge, had been developed and maintained, it had been found not merely desirable, but absolutely necessary to further training and education for those who were similarly engaged, by affording facilities by means of which men might not only meet together for the interchange of views, but should formulate and define upon paper the results of their knowledge and experiences in practical working, so that their colleagues and fellow-members might criticise and examine them. He was not going to trouble them with a speech, but he hoped they would permit him to mention one or two facts connected with the local society of which he was this year the President, and which he ought to add was only a branch of this parent institute. He, for one, hoped—and he knew that the hope was shared by his colleagues in his district—that the day would soon come when Mr. Adamson and the Council of the Institute would be able to give them a reasonable habitation within the limits of the City of London, where marine engineers might congregate, where they could read their papers and meet others of their profession. When some such extension as this had been carried out it would be seen that as marine engineers they had a visible institution which they could visit, and which many of them would delight to visit when they came to London. The advantages of such an institution as this, and of such societies as he had enumerated, were enormously enhanced by gentlemen coming forward like their President and his distinguished father, to assist them with both brains and means—gentlemen who were disposed to help their fellows less fortunate than themselves. In the Bristol Channel Centre they had two members who held the Denny medal. Two members of the same centre were also the authors of the papers that had been referred to on propeller shafts, and on the defects in those shafts which, previously latent, became very visible when the steamers visited the dry docks of Cardiff. Perhaps there was no port in

the world where matters of this kind could be better illustrated ; but the aim and the desire of the members of that centre were that the sea-going engineer, when he came into port, should have a common meeting place where he could rub shoulders with his fellows, where he could hear papers read and discussed, where he could improve his knowledge of his profession, and where he could keep aloof from all that was unworthy. An institute which furnished such a central meeting place for engineers would also be a benefit to shipowners and to the commerce of the country at large. Without further trespassing upon their time he would ask them to join with him in drinking the toast of "Kindred Institutions," and he coupled with the toast the names of Mr. Archibald Denny and Mr. D. J. Dunlop.

Mr. ARCHIBALD DENNY in responding said that on the official programme his name was down to respond to this toast, but they had already heard his voice, as at the request of their honorary secretary he had at a few moments' notice undertaken another duty. He therefore thought that he might have been relieved of his present duty, but they all knew their honorary secretary, and he had refused to let him off, and in consequence he had to reply for "Kindred Institutions." Sir John Gunn had mentioned several of these societies but there were several others which he had left out, and perhaps Sir John would not object to him adding to his list. There was the Royal Society of Edinburgh, the Société Technique Maritime of Paris, the Shipwrights' Association, and the Junior Engineering Society, while he also represented that evening an institution in New Zealand that was affiliated to this Institute—the New Zealand Marine Engineers. When he was in New Zealand last year, the New Zealand Institute of Marine Engineers did him the honour of making him an honorary associate, and in presenting him with a small souvenir of the occasion they gave him to understand that he had only one colleague in Great

Britain, Sir Fortescue Flannery, a past president of this Institute.* The premier society—the Civil Engineers—had been described as a body which sought to direct the forces of nature for the use and convenience of man, and it therefore covered the whole ground of shipbuilding, engineering and everything else, but as years passed it had been found that each department of engineering had grown to such an extent that it had to be specially and separately dealt with. There was no society, however, to his mind, that could do so much for marine engineering as the Institute of Marine Engineers. The members could give them the results of their experience at sea, but if they were going to do this, he appealed to them to give it correctly. If any one of the members would be good enough to read a paper showing his colleagues how data should be got together as to the consumption of coal per I.H.P., that engineer would render a great service to his profession. At present each engineer on board ship tried to show the smallest consumption he could, and his owner was pleased as the figures to the right of the decimal point went down. In the year 1882, when he had come fresh from the Royal Naval College at Greenwich and had all the enthusiasm of a budding naval architect he made a voyage to America, during which he went every night to the chief engineer's room. He discussed all kinds of abstruse questions with the chief engineer, and ultimately asked that gentleman to let him see his indicator diagrams. The engineer replied that he had not got any. "What, don't you take them every day and does not the superintendent require it?" The reply was: "The superintendent is not such a fool, but if he did I would take a lot of diagrams at the beginning of the voyage, and date them to suit." He had even heard of one ingenious engineer who made a template for his diagrams.

* Presented on the occasion of the visit of the Premier of New Zealand to attend the Jubilee Celebrations. (Cf. Dinner Report, June, 1897.)

That was one way of getting good diagrams, but the young engineers present had better not take the tip. Within the last few weeks he had got another example. He had got from a shipowner the logs and the diagrams. But the engineer was a truthful man and he gave the revolutions at the time he took the diagrams—they were sixty-five and the horse-power 1776, and the shipowner had worked out the coal consumption from these figures at 1·4. When he (Mr. Denny) came to examine the log he found that the average revolutions on the whole voyage was sixty-one, when the power was only 1,450 instead of 1,776, and of course, under these circumstances, the coal per I.H.P. was 1·75, a figure much nearer the truth than 1·4. If engineers and owners would just think for one moment what the consumpt of water per I.H.P. in even the best triple expansion engine was, say 15-16 lb., and then consider how many units of heat there were in a pound of coal and how much water it would evaporate, there would be fewer absurd statements made about coal per I.H.P. What he wanted to say therefore was that if the engineers of this Institute would have a meeting and try to codify a set of regulations by which all engineers should be governed in producing their consumpts per I.H.P., while it might be very distressing to ship-owners, it would be of great service to shipbuilders and engineers.

Mr. D. J. DUNLOP, who also responded, said the honorary secretary had referred to the question of tail shafts and to the breakages that occurred in those shafts. This was a question which was giving immense anxiety to all shipowners, shipbuilders, and engineers, but in looking into this question—and it was one to which he had given much attention—he had asked marine engineers to devise some means of ascertaining whether it was the shaft which broke itself, or whether it was not the ship that broke the shaft. In the olden days they had very few broken shafts when vessels had the form of vessels. Nowa-

days ships were of any form, and the tank that went to sea with its elastic bottom, which could be moved up and down by the waves of the sea, going in ballast or deeply laden, was very likely to break its shaft. If anyone would take the trouble of making a simple experiment with a model on the lines of what we sent to sea nowadays and called a ship—they would see that it was not what they were accustomed to in his younger days. They got a platform that was constantly going up and down, and if they found a means of taking careful observation they would find that with vessels of full form at sea there were influences constantly at work in the hull tending to strain the shaft. What was wanted was that the co-efficient of displacement or fineness of the after-body of the hull should be taken into consideration in calculating strains, so that flat bottoms might be made more rigid, instead of as at present providing for equal scantlings for all types of hulls of equal tonnage, irrespective of their forms or degrees of fineness.

TOAST, "THE VISITORS."

Mr. A. BOYLE (Chairman of Council): I have to propose the next toast on the list—that of "The Visitors"—a toast which I am sure you will honour and respond to with the enthusiasm which it deserves. We are glad indeed, as marine engineers, to have so many gentlemen present as our guests—gentlemen occupying prominent positions in the shipping world or connected with marine engineering and ship-building, and all interested directly or indirectly in trade and commerce. I know you will join with me in extending to all our visitors a hearty welcome, and on your behalf and speaking for the Council I wish to say that all our members, both at home and abroad, are proud of and feel honoured by their presence. We have to-night with us a distinguished gentleman representing the colonies—Sir Walter Peace, the Agent-General for Natal; and the Hon. W. P. Reeves, the Agent-General for New Zealand,

also intended to be present, but unfortunately has not been able to attend. I think that as marine engineers we are particularly called upon to welcome a gentleman in the position of Sir Walter Peace, and we are very sorry that Mr. Reeves is not here to share the welcome, because so many of our members are in direct touch with the colonies, being connected with or serving in those large fleets of steamers, which form the visible bond or connecting link between the colonies and ourselves. And surely after the events of the past twelve months we are doubly called upon to welcome these gentlemen and to show our appreciation of what the colonies have done for us. In those dark days of last December, when our hearts were saddened and our minds sometimes filled with anxiety by the occurrences in South Africa, the loyalty, the enthusiastic loyalty and devotion of our brethren from Canada, from Australia, and from New Zealand when they so readily and so spontaneously came to our assistance, and so gallantly backed up the splendid services rendered by the volunteers from Natal and Cape Colony—it was a bright gleam of sunshine in an otherwise clouded sky, and the bond of affection between the colonies and the motherland was thereby increased and strengthened more than could have been done by a thousand Acts of Parliament or speeches, however eloquent, from a multitude of orators. Gentlemen, we welcome the representatives of the colonies. We also expected to have with us several of the naval attachés from the different embassies in London. We have a note from Capt. Fieron, the French naval attaché, who accepted our invitation and intended to be here, but he was called away to France. The Italian and American naval attachés also regret that they are unable to be present. But we have with us Commander Kawashima, naval attaché to the Japanese Embassy, and representative of that friendly nation which, within the lifetime of many of us, emerged from her previous seclusion, and “putting on civilisation as it were a garment,” by her capacity for assimilating Western ideas and

science, and her skill in the arts of peace and war, is fast raising herself to the position of one of the leading nations of the world, and is doubtless destined to play an important part in events yet to come in the Far East. Time presses, gentlemen, and I will not detain you a minute longer, but I must not omit to mention Mr. Ellison Macartney, the secretary to the Admiralty, who not only accepted our invitation but added to his kindness by proposing the toast of "The Institute," and that immediately after the labours and turmoil of a contested election. May I digress for a moment, gentlemen, to say how heartily we congratulate our esteemed President, Col. Denny, our past President, Sir Fortescue Flannery, and our friend Mr. Ellison Macartney, on successfully emerging from the electoral battle. Two others of our members, Sir Edward Reed and Sir A. Haslam, have also been victorious in the fray, so that we are represented on both sides in the House of Commons; and then we have one of our past Presidents, Lord Kelvin, soon let us hope to be joined by another one, in the House of Lords as well. In fact it would almost appear as if the presidency of the Institute was a passport—well, at least a stepping stone—to national honours. But I was saying that we are indebted to Mr. Macartney for proposing the toast of "The Institute." We all attach the greatest importance to what Mr. Macartney has said, and we look upon it as a good omen that a gentleman in his position should be so greatly interested in marine engineers. We trust that it will hasten on the time when the connection between the Royal Navy and the mercantile marine will be greatly extended. Several of the engineers in the Royal Navy, I am glad to say, are members of the Institute, and quite a number of our members belong to the Royal Naval Reserve, but there is plenty of good material among the engineers of the merchant service to greatly increase that number to form a strong reserve to the engineering branch of the Royal Navy, which, I believe, would strengthen the

Royal Navy and benefit the merchant service as well. Let me also mention Mr. Duncan Mackinnon, chairman of the British India Co., who intended being present to-night, but was detained elsewhere, and Mr. Howell, the assistant secretary to the marine department of the Board of Trade, who has favoured us with his company and proposed the toast of "Ships, Colonies and Commerce." He referred to those cases of repairs to broken propeller shafts and paid a high compliment to marine engineers. I am sure that the mention of those instances of courage in difficulties, of readiness of resource, of skill and dogged determination to carry out the repairs necessary to take the steamer to port without assistance, will be greatly appreciated by the engineers who so successfully mastered the breakdowns. In this connection may I mention that the Council of the Institute are considering how they can best show their appreciation of the work done by engineers in cases such as those referred to, either by presenting a medal or making some other suitable acknowledgment. I must not forget to mention that we also have the good fortune to have present to-night the Right Hon. W. J. Pirrie, head of that eminent shipbuilding and engineering firm, Harland and Wolff, the name of which firm is as well known to marine engineers as the name of the ship they sail in, and is, I was going to say, a household word—well, at least a messroom word among the members of the profession throughout the world. I ought also to say that a large contingent of our fellow-members from the Bristol Channel Centre, headed by their worthy President, Sir John Gunn, are with us. We are glad to see them, and I need not say how heartily welcome they are. I am sure that no further words of mine are necessary to commend this toast to you. I propose the toast of "The Visitors," and I couple with the toast the names of Commander Kawashima, of the Imperial Japanese Navy, and Mr. J. T. Milton, the chief engineer surveyor to Lloyd's Register.

Commander KAWASHIMA in reply said he thanked the company most sincerely for the very warm manner in which the toast just proposed had been received and also for the honour they had done him in asking him to respond to it on such an auspicious occasion. As a matter of fact he felt that he was in an assembly of masters who were looking after the training of the young Japanese navy. He need hardly remind them that Japan was an island country exactly like the United Kingdom. The greatness of England, ever since they had realised it, had been the subject of admiration among the Japanese people, so that when they started to take up Western civilisation they had no hesitation in taking England as their model, especially in naval and other maritime affairs. Her Majesty's Government and people were always kind in helping them on with their works, and they had English naval officers, marine engineers and men to assist them. As to the ships and engines, they were mostly built in this country with its world-famed skill and reliable workmanship. The Japanese navy was really an outcome of England, which had the most expert engineers in the world. As for the *personnel*, many Japanese naval officers, engineers and naval architects were trained in this country. He hoped England would ever continue its motherly kindness for Japan, and as England developed in marine engineering he hoped that Japan would be dragged along under English guidance.

Mr. J. T. MILTON also briefly replied. He expressed his warmest thanks for the opportunity of being present on this very interesting occasion and for the privilege of listening to a number of most excellent speeches. Especially interesting were the speeches that were delivered in connection with the toast of "Ships, Colonies and Commerce." It had been clearly shown that ships, colonies and commerce made the Empire, and as ships, colonies and commerce could not exist in these days without the aid of the marine engineer it might almost be said that marine

engineering was really the basis of our present Empire. The Japanese naval attaché had spoken of the Japanese navy being modelled upon that of England and of the assistance which Japan had received from English naval officers and engineers, but his modesty had not allowed him to mention that large and important vessels were now built in Japan. Several large steamers had recently been built in Japan which could hold their own with some of the best steamers built in this country. On behalf of the visitors he thanked the Institute very heartily for its hospitality; they all hoped that the Institute would flourish, that it would have many more annual dinners as successful as the present gathering, and that they might again have the pleasure of enjoying the hospitality of the members on those occasions.

TOAST, "THE PRESIDENT."

Mr. ASPLAN BELDAM (the First President of the Institute) proposed the health of the President, Colonel John Denny, and said that he had very much pleasure in submitting this toast. Dr. Peter Denny, the father of their esteemed President, was a man known all over the world, not only as an eminent shipbuilder and engineer, but as a friend to all shipbuilders and engineers, and he left behind him a valuable legacy to this Institute to encourage young engineers in reading papers on scientific and practical questions connected with their profession. Everybody knew the name of Denny in connection with shipbuilding and engineering, and among those in their employ, the whole family were constantly doing good, especially by the manner in which they encouraged young men to study and progress in their business. The Institute of Marine Engineers was exceedingly fortunate in having secured a gentleman of the position and influence of Colonel Denny to fill the important office of President, and he was sure that the Institute had greatly benefited by

having such a gentleman at its head. Colonel Denny had presided over the present dinner in a most admirable manner, and he was quite sure that the members would receive the toast of his health with the greatest cordiality.

The toast was honoured with much enthusiasm.

Colonel DENNY, on rising to respond, was loudly cheered. He said he had to tender his best thanks to Mr. Beldam, the first President of the Institute—the Alpha of the Institute—for the very kind terms in which he had proposed the health of the Omega—but while Mr. Beldam would remain the Alpha of the Institute, he trusted that he (Colonel Denny) would not remain the Omega—the last of the Presidents. When he was asked to take that chair he felt that he was not worthy to fill it, especially when he looked at the list of distinguished men who had filled it before him, but he knew that if it was only the reflected honour which came upon him from his father he would be heartily welcomed by the members, and that anticipation had been fulfilled. He remembered how proud his father was when he occupied that chair, and was able to found the medal which had given great gratification to them all. He (Colonel Denny) looked upon his election to the office of President more as an honour paid to the memory of his father than as a recognition of any ability that he might himself possess, and regarding the matter in that light he was deeply grateful to the members, because when he looked back on what he had been able to do he saw how very little he had done. He attended one of the meetings of the Institute when Mr. Macfarlane Gray read his paper on the balancing of engines, and when he was able to keep order without any difficulty whatever, but that was the only occasion on which he had been able to attend their meetings. Might he plead, however, for some little leniency on account of the variety of his

occupations. If he was not a working engineer himself he had been among engineers all his life. He had a keen appreciation of engines, and he had a great delight in seeing the improvements that were wrought in them. His connection with engineering had done him a great deal of good in his work in Parliament, and although the House of Commons was not looked upon as a place where anyone went for common-sense decisions, there were times when he and others like him could be of some little use there. Now that his constituents had again returned him to the House of Commons he was looking forward to being able to do some little good particularly in relation to marine engineers. He had recently read a paper written by an engineer, about engineers in the Royal Navy, and it would appear that distinguished and valuable as were their services, the position of engineers in the Navy was not yet sufficiently recognised. That was a subject in regard to which their President hoped that he might be able to do some useful work in the House of Commons. He was perfectly convinced that until the position of the engineer was properly recognised and regulated in the Navy, there would always be grumbling in the service. He believed that the engineers in the Navy were as loyal and patriotic a body of men as were to be found anywhere, but one might be loyal and patriotic under difficulties, and there was no necessity for these difficulties existing. He was particularly anxious to see the old-time prejudice as to the position of the man who drives the engine and the man who stands on the bridge done away with, so that all branches of the service might work cordially together. Somebody was also wanted in the House of Commons to see that extravagances were not permitted in connection with Her Majesty's ships. The cry was all for weight carrying, but after all a ship was only a compromise, and the question was how they were to get the best results. Another question in regard to which the marine engineers in the House of Commons could come to the aid of Her Majesty's Government

was the water-tube boiler controversy, and he believed the Government recognised that in relation to this matter the engineers in the House did render very good and useful service. But all this was no reason why they should have a member of the House of Commons as president of this Institute, and since they did him the honour of electing him to that office they had all backed him up most loyally and cordially. One thing he could say was that the little insight he had had into the working of the Institute had shown him that it was a society of which anyone might be proud to be the President. The real work was done by the Council, the honorary officials, and the members themselves. From small beginnings they had shown an earnest interest in their life's work, and they had determined that their work should be done as well as they knew how. He was proud of his election as President of the Institute, and he should always regard it as one of the greatest honours that had been paid him.

“AULD LANG SYNE.”

During dinner a programme of music was performed by the Bijou Orchestra, conducted by Mr. J. Pougher, and in the intervals of the speeches a pleasing selection of songs was rendered by Miss Ella Davies and Mr Daniel Price.