

## PRESIDENTIAL ADDRESS.

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*(Read before the Sydney University Engineering Society, on  
April 13<sup>th</sup>, 1904).*

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Gentlemen, before vacating the chair I wish to review shortly the principal events that have occurred during the past year, which directly or indirectly affect the Society, and to make my farewell address to you.

The most important event of the year was the second benefaction of £50,000 to the University from one of our honorary members, Mr. P. N. Russell. This sum is to be devoted to the Engineering School, and was given on condition that the State Government spent £25,000 on a new building for the school, which condition was agreed to. The result of this endowment will be to enlarge the scope of engineering study, and to give an impetus to the school that should greatly benefit our Society.

When you did me the honor of electing me President, I found that, under the guidance of my predecessor Mr. Bradfield, M.E., Assoc. M. Inst. C.E., the Society had made great headway. The Journal of Transactions had improved and increased in size, the finances were most satisfactory, and the Society generally in a flourishing condition. I felt that I would have a difficult task to maintain that excellence, but throughout the year have endeavoured to accomplish that end. To assist me I had the unstinted assistance of a most admirable Council, who attended the numerous meetings in an unexampled manner. To them, in retiring from the presidency, I wish to tender my thanks for their co-operation.

The business of the year included a most trying item, viz., the revision of the Constitution, Rules, and By-laws of the Society. This occupied the whole of many Council Meetings and several General Meetings to the exclusion of professional matters.

The Annual General Meeting was held on 8th April, 1903, at which the retiring President, Mr. J. J. C. Bradfield, M.E., Assoc. M. Inst. C.E., delivered his presidential address dealing chiefly with the important questions of water conservation and forest preservation, with a complete digest of the New South Wales water laws to date.

During the session six ordinary and two special general meetings were held, at which the following papers were read:—"Discussion on Steel-concrete Bridge Construction," by Mr. H. H. Dare, M.E., Assoc. M. Inst. C.E., and Mr. J. W. Roberts, B.E.; "The Design of Riveted Joints in Girders," by Professor W. H. Warren, Wh. Sc., M. Inst. C.E.; "The Use of Influence Lines in the Designing of Structures," by Mr. R. W. Hawken, B.E., B.A.; "The Murray River: Irrigation and Navigation," lecture with lantern views by Mr. R. P. McKay, Secretary to the late Inter-state Royal Commission on the Murray River"; "Pymont Bridge," lecture with lantern slides by Mr. Percy Allen, M. Inst. C.E.; "The Design of the Retaining Walls, Pymont Bridge," by Mr. J. J. C. Bradfield, M.E., Assoc. M. Inst. C.E., written chiefly for student members.

The thanks of the Society are due to the Hon. the Premier, Sir John See, for his courtesy in allowing Mr. McKay's lecture, with illustrations, to be printed by the Government Printer, for inclusion in the Journal.

Through lack of funds it was decided, with regret, not to print at present the paper of Mr. J. P. V. Madsen, B.Sc., B.E., entitled "An Investigation of the Effect of Alternating or Repetitive Stresses upon the Physical Properties of Materials," for which he was awarded the Russell Medal. For the same reason some written discussion on contributed papers has been omitted from the Journal.

During the year, the membership of the Society has increased by one honorary member, Mr. J. Davis, M. Inst. C.E., Under-Secretary for Public Works, and twenty-seven ordinary members, including Professor Carslaw and Messrs. A. J. Gibson, J. A. Schofield, and A. C. F. Webb, members of the teaching staff of the Faculty of Science. The number at present on the roll reaches a total of 204 ordinary, and eleven honorary members.

It is with regret that I draw attention to the fact that the general fund is not in such a satisfactory state as at the beginning of the session, although the other funds are in a much improved condition. One of the first acts of the Council was to separate the trust funds from the general account, and lodge the former in banks where they might draw interest. The life membership fund has increased by twenty-five guineas, and the interest only is drawn and placed to the general account; the prize fund has increased by six guineas and from this fund nothing is drawn.

One of the reasons for our general fund showing a deficit is the wandering abroad of members. This State at the present time offers no inducements to engineers, and as many as can do so, prefer to try other States and other lands. The recent retrenchment in the engineering branches of the Government have thrown numerous civil engineers out of employment, a condition that tends to re-act on the school and the Society, causing students to choose other branches or other professions, since private enterprise offers little or no opening for young engineers.

Another reason for the deficit is the custom prevalent among members of allowing their subscriptions to accumulate for a year or two before paying. If the members only realised the assistance it

would be to the Council, I am sure the subscriptions would be paid earlier in the session. As it is, we have to estimate how many of those in arrears will pay *after* the new year, and since all expenses are incurred *before* the new year, it can be seen that the Council is to a great extent working in the dark. For the year just closed, subscriptions were paid by only eighty-six members, out of a roll of 215. There is no doubt that more than sufficient subscriptions in arrears will be received to cover our deficit, but it would assist greatly if members did not take advantage of the time limit allowed by the Constitution. It is quite impossible for this Society to attain the success it deserves and which we wish for it, if matters go on like this. The Council has no remedy except expulsion, and that is a course only to be adopted in extreme cases. The total amount outstanding is 145 guineas, of which some will doubtless never be paid. For a young Society as we are, this is to be deplored, as it tends to belie the *esprit de corps* on which the Engineering School rather prides itself. If the deficit of this year be not covered by arrears coming in, the Journal of next year must suffer, and it would be much to be regretted if we were not able to at least maintain our present standard.

In conclusion I propose to briefly address you on "The Advisableness of a Code of Ethics for Engineers." This is a subject that should be brought under the notice of every engineer at one time or another, and especially one emanating from a University.

It may be considered unnecessary to introduce the subject, since the standard of honor in the British race is the highest possible, and is insisted upon in private, commercial, and business life, and to a greater extent in professional life. In no case are there written rules of etiquette, but the unwritten rules are learned by all by observing, during the term of preparation or probation, the manner and methods of those in the highest ranks of the particular pursuit. Once a novice is out of his pupilage and enters the world of men, he is not spared if he breaks a precept. A man may not err in this way without being ostracised by his superiors and equals, and the fear of this frequently preserves one from transgressing, when his daily needs press him so sorely that he views the code of ethics as a hindrance to his welfare.

Some may say that there is an unwritten code of ethics in our profession, but on maturer examination it will be seen that it is the high standard of honor in individual members who follow, each for himself, a strict line of conduct, that elevates and enriches the profession, and endows it with their own virtues.

The consideration of our moral obligations towards one another in any phase of life, and particularly in business life, is apt, in this age of hustle and competition, to be left to a more convenient season, to the degeneration of our higher natures, and it behoves us, as a Society, if we are to work on the highest plane morally and intellectually, to present this thought to its members.

All engineers must admit with regret that the profession is not accorded the same honor as are the professions of Medicine and Law; one reason being that anyone can call himself an engineer, and practice as such, whilst legislation makes it necessary for each member of the

other professions to pass specified examinations, a course which makes them distinct bodies. But another reason is that a body will not receive honor whose members do not honor each other, and it is in this respect that a code of ethics would be beneficial, since its object would be to guide and control careless or indifferent engineers.

