

Editorial

"Romance in Engineering."—In this issue is published the paper "Romances in Engineering" presented by Mr. J. N. Das-Gupta, our Vice-President, early this session. Mr. Das-Gupta's intention was to deliver his subject in the nature of an informal talk and not as a paper for publication. We had therefore difficulty in obtaining permission to print our report of his talk. Hence the delay in publication. The subject is one which will be of interest to every engineer, and will most likely, increase somewhat his pride in his profession.

Air Brakes.—The continual demand for greater and greater speed, the increase of traffic in narrow thoroughfares, and the resulting frequency in need for sudden stoppage make it of the utmost importance to have efficient braking systems in all speedy vehicles. The recent improvements in the Calcutta Tram Cars have created a wide interest and their air brakes appear to have proved of great advantage. A brief description of the use of air brakes in Calcutta tramcars has been presented to us by one of our graduate members, Mr. Pratapchandra Chandra, B.Sc., and we take pleasure in publishing the same. The desire to spread useful knowledge is much appreciated, and articles of this nature are most welcome.

Contributions.—The fear that one's grammar may be faulty or manner of expression may be laughed at, should not be allowed to prevent the spread of engineering knowledge. Though literary taste and clarity of expression are necessary to make reading easy yet lack of these will not hide from the understanding of the intelligent and considerate reader what the unpractised author endeavours to convey in his first literary effort.

No knowledge of value to engineers should be allowed to remain hidden by any body unless he be bound by contract or moral conscience to do so for the commercial benefit of ones client or employer, or for the strategy of his nation's military defence, or else forced by necessity to exploit his secret knowledge for his own pecuniary benefit. It is recognised as a charitable act for one to make public any knowledge that gives him a professional advantage over those less informed and it is for the performance of this charitable act that we look to members of the Association of Engineers and offer our gratitude for their contributions to this Journal.

Charitable purpose.—It has often been questioned by ambitious engineers, “Of what advantage is the Association of Engineers to its members? What advantage to their profession do they hope to gain by joining it?” It is worth while pondering over these two questions. For the answers to these show the purpose both of applications for election to and resignations from the membership of the Association tendered by individual members. They answer the question, “Do members join the Association for their own advantage or for a charitable purpose, or for both?” This is of very great importance to the existence itself of the Association, and is also of some legal value.

It is said that by permitting a member to write the title M.A.E. or A.M.A.E., etc. after his name the Association confers on him a certain measure of advantage in the practice of his profession. For the title leads the public to put faith without much enquiry on the reliability and capacity of the engineer bearing that title and thus constitutes an advantage over those who practise the profession without such title.

To this it is objected that as any one may practice the engineering profession without any title whatever, the title is not necessary to its practice, and moreover, as the title itself is not conferred until one has already held a position of responsibility and attained a certain measure of success therein, the title cannot be said to have contributed in any way to that success. The advantage to be gained in profession from titles of this type may therefore be said to be imaginary.

There is a tendency however to regard the membership of this Association as a stepping stone to high public service because it has been observed in some advertisements inviting applications for vacant posts in public service that among other qualifications the applicant is required to be a member of some such technical society. It would appear from the advertisements that there is a distinct advantage to be gained by joining the society whose name is mentioned. But that advantage is only apparent and not real. For this type of advertisement is faulty. What is really meant is that the applicant is required to possess those qualifications which would entitle him to such membership. The actual membership is not necessary to the performance of the duties required of the person appointed to the post and is of no concern, nor should it be of any concern to the appointing authorities. Advertisements of this type tend rather to give publicity to the Technical Society whose name appears in the advertisement and this to a certain extent affects its membership roll as well as those of sister bodies. On account of the apparent opportunity of securing service and advancement by joining the society whose name is often mentioned there is a scramble for membership of that body

and a fall from the membership roll of similar bodies whose names seldom appear. Both resignations and applications for membership on this account are matters of some concern to the councils of such bodies. Loss of members is always regretted. But loss of such "self seekers" is no loss. Influx of members is welcomed. But such members are of no value to the Association. For their purpose in joining the Association is only to obtain professional advancement. They never help in promoting the aims and objects of the Association and leave it or discontinue paying their subscriptions as soon as they have secured a suitable post. Inflation of the membership roll by admission of "self-seekers" is therefore undesirable.

It is interesting to note that while some people have been tendering resignations because they find no advantage to themselves in continuing their membership, one of the best known and longest established technical Institutions in existence has been held up before the law courts several times to show cause why its income and properties should not be taxed on account of the professional advantage it offers to its members, and the only ground on which the judges found that it should be exempt from payment of taxes was that the professional advantage, if there was any, derived by members from their membership was not among the objects of the Institution and that its purpose was a purely charitable one. This legal consideration should be borne in mind by members and especially by members of the council whenever there is a motion to make provision for the pecuniary benefit and professional advantage of members of the Association. If any such attempt becomes noticeable, the purpose of the Association will no longer be recognized as only charitable, the income and properties will then be liable to taxation and that taxation also must then be provided for.

The main function and purpose of the Association is to provide the place and opportunity to discuss developments in the scientific theory and practice of the various branches of engineering and to give publicity to the subjects discussed. It has been felt by all scientists and engineers who have a new invention or scientific discovery or some new process to discuss that neither the home nor the place of business or of service, nor the club is a suitable place for such discussion. Attempt at technical discussion in any of these places is opposed by either ignorance or impatience or arrogance of listeners who lack either the time, the ability, or the desire to consider and understand the subject matter. A gathering of those who are interested in the subject and have as well the ability to understand it is therefore desired, and to obtain that gathering some kind of an organisation is found necessary. It is mainly for this reason that technical societies are formed and such stringent regulations regard-

ing enrolment to membership maintained. The purpose of these regulations is not to enable selection for employment in public service but to obtain members capable of contributing to the discussions.

The publication of the papers read and the report of the discussions held help to spread wider the knowledge of developments that would otherwise have remained confined to a select few. This spread of knowledge enables members to give better service to their employers and advice to their clients but is of no direct pecuniary benefit to the members themselves. It is mainly the public who are thus benefited.

Applicants for membership of the Association therefore should not hope for any gain from their membership other than the opportunity to give when they feel that they have something new to give for the general benefit of the public.
