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**OUR PROFESSION AND OUR SOCIETY—THEN AND
NOW**

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AS ONE'S term of office comes to an end, obvious questions to contemplate are "Has the profession of Civil Engineering maintained the status it enjoyed at the time of the founding of our Boston Society of Civil Engineers in 1848"? "Has the Society held its own during recent years"? "Are we living up to the standards our Founding Fathers gave us for an example"? In the case of the latter, I do not want to give the impression that I think we should be slavish to tradition in our rapidly changing times. If you will pardon the presumption, I will first try to interpret the founders' objectives as I visualize them. According to our Constitution adopted June 15, 1910, "the objects of this Society are; the professional improvement of its members, the encouragement of social intercourse among engineers and men of practical sciences, and the advancement of engineering." In addition, I am certain that the organizers also had a keen interest in the development of young men and in the promotion of service to the community.

Civil Engineering as known at the time of the founding of our Society encompassed a pretty broad field including all of the non-military engineering of the day. Our early members supplied power to New England industry by harnessing the numerous streams with which this section of the country was singularly blessed, laid out needed water supplies and designed and built canals for transportation. To accompany these endeavors which would now be known as hydraulic works were all the appurtenant structures and mechanical equipment to make best use of this water. Included were dams and intake works,

power units and locks or inclines for raising barges from one level to the next or to by-pass rapids. Waterfront works and protection were also of prime importance. Surveys had to be made, more adequate roads extended to open up the frontiers and later railroads built to supersede most of the canals. These necessitated the development of bridges, many relatively simple, but others quite complicated to allow for the passage of shipping which, by tradition, possessed the right of way. What a challenge, when all engineering was Civil Engineering and the Civil Engineer conceived, planned and carried to completion all of these works.

And how the challenge has changed! As the art of engineering has become more complex, the main Civil Engineering stem has branched out and we have specialization in surveying, bridge engineering, structural engineering, hydraulic engineering with its own subdivisions into water supply, water power, flood control, water front, hydrologic and hydrographic categories, as well as sanitary, soil mechanics, highway, railway and airport engineering. All of these fields are considered to be within our own present day Civil Engineering and we have the other recognized fields of Mechanical, Electrical, Mining and Chemical Engineering with all their own off-shoots that are no longer recognized as Civil Engineering.

There is much discussion of engineering education and some would have us believe that many of the fundamentals that make a well-rounded civil engineer are no longer necessary. I wonder, if in our present day of specialization we don't need more men with a wide point of view. Some of us have so narrowed our interests that, for example, meetings of our own Main Society with broad subject matter attract smaller attendances than do many section meetings that emphasize some small phase. We find ourselves subdivided into smaller groups that attend only meetings of their own sections. I have been present at meetings of all of the sections this year and seldom saw the same members at the different meetings. I do not want to be misunderstood on this point and have you feel that I do not think section meetings important because I do realize that they serve a great purpose. However, I am convinced that civil engineers should not lower their sights to such an extent that they are not interested in the broader aspects of their profession, with the result that each member attends only the particular meetings dealing with what he considers at the time to be his chosen field. It often happens that,

after concentrating on one field for a considerable length of time, a man sees an opportunity to improve his professional status by promotion to a position that requires knowledge or familiarity along other lines than his speciality, and he may find himself disqualified because he has unwittingly set his own ceiling. The unfortunate result is that the Civil Engineer, who was once the overall planner and project engineer has now been forced to the background in a great many instances by others who use him simply for some special knowledge. Frequently men in other fields of engineering and so called "planners" and others are pre-empting the civil engineering function. Why lose our rightful position by default?

I also believe that we have tended toward an interest in things rather than ideas. In other words, we would prefer to hear about monumental structures rather than fundamental ideas and philosophies. I was called to task by one of our members recently because he thought "Trends in Engineering Education" was not of sufficient interest to older members to be a suitable subject for a meeting. And speaking of older members, brings up the subject of their attendance at meetings. It seems as though they are generally conspicuous by their absence. A great many of us look back upon our younger days with pleasant memories of the opportunities we had at meetings to associate with older men we respected. We learned of their experiences and ideas to our great advantage. Of course our Founding Fathers realized the desirability of such an association, for in their time, it was particularly necessary, since technical schools were few in number, and the dissemination of knowledge came about largely through such meetings. I am certain that there is still a great desirability for the exchange of ideas between the generations, and we have the singular opportunity through our Society to bring it about. Why not make an effort not only to insure the attendance of our older members but to urge them in turn to bring young men to the meetings? The young men are to succeed us and we have an unusual opportunity to help them in the process. Perhaps we have been motivated by too much self interest or rugged individualism to encourage them along the way. Or perhaps our profession is becoming too impersonal.

Do we enjoy the same standing in the community as our founders and, if not, what can we do about it to regain our place in the sun? For one thing, let's overcome the sense of inferiority as the more

glamorous engineering fields temporarily take the spotlight. Let's take a genuine pride in our profession and our Society and their objectives and accomplishments and emphasize these points to the outside world with our heads up. We should start at the high school level and see to it that the younger generation understands the basic concepts of Civil Engineering and the important function of the Civil Engineer in the community, thereby creating in the students' minds the desire to enroll in the civil engineering courses of our qualified technical schools. Enrollment in our field has fallen off to a large extent due to our own apathy and to self advertising by members of the new fields who are not over endowed with modesty. Why should we "hide our light under a bushel"?

Pioneering that genuinely comes within the scope of civil engineering should be recognized as such instead of becoming a vocation under a new name due to pressagenting of a group that wishes to impress the public with a new patter of its own. Civil Engineering was always fundamental and its ideas can normally be expressed in straightforward terms. It seems as though we are becoming confounded every day by new terminologies and meaningless words uttered by those who want things expressed in terms that no one outside a select few can understand. As the author of "Calculus Made Easy" said years ago "the writers of text books of advanced mathematics seldom take the trouble to show you how easy the easy calculations are. On the contrary, they seem to desire to impress you with their tremendous cleverness by going about it in the most difficult way."

When it comes to advancement of engineering and the professional improvement of its members, or at least, an opportunity for professional improvement of members, I believe the Society has made great strides. Our Journal has a wide circulation and is read at the far corners of the world. This was strikingly brought out at a recent meeting when a speaker from South Africa told us how engineers there looked forward to the receipt of each issue. Our special lecture courses in Hydraulics, Sanitary Engineering, Structures and Surveying have been well attended and have aroused widespread interest due to their high caliber. Our two volumes of reprints of papers from our Journal on the subject of "Soil Mechanics" have been in steady demand ever since their publication and are used as text books at a number of engineering schools across the country. In fact demand for these volumes has been so great that it has been necessary to re-

produce the first volume a fifth time. Our special committees that have assembled and published New England Flood data on three occasions, the most recent of which was this last year, have accomplished a monumental task and the service to their fellow engineers, both present and future, is invaluable. This same type of service has been rendered by the special committees that have assembled Boston Boring Data, the latest report of which is now in process. The generosity of a number of members has created funds for use in research and special projects.

Among the objectives mentioned earlier, that of social intercourse should be the easiest to fulfill. With a membership of some eleven hundred we should have a large turnout at any scheduled meeting. However, some of our attendance records are very disappointing and we give the impression that we are not interested in our fellow members or in what they have to say. Of course we must recognize that today with our ease of mobility, we find ourselves in an age of joiners and would like to be in many places at the same time. Consequently we have many conflicting interests which make our meeting attendance suffer. However, I believe that if we are articulate we can maintain our just position in spite of competition. If we talk it up we can start a membership boom and a meeting attendance improvement. Strange as it may seem, countless printed invitations and notices do not bring in members or fill meeting places. What we need is personal interest and contacts. If a prospective member is taken to meetings and introduced personally to the others present he enjoys the warm atmosphere and personal touch and makes up his mind he wants to be a member of the organization. Many members have become lax, and although it should not be necessary, have to be brought to meetings in order to assure their attendance. A hard core of really interested members can correct this situation, I believe. Why don't we all become a part of that hard core?