

is compelled (almost without realizing it) to consider economic and social problems, and particularly those arising out of a proper appraisal of equity between man and man. The latter includes a study of the complex problems of tax valuations as between individuals and corporations, advice as to financing of public works, and advice in arriving at just and equitable rates for service rendered by public utilities. The engineer is thus becoming not only one who directs the great sources of power in nature for the use and convenience of man in the most economical manner possible, but he is fast becoming an economist and an arbiter in industrial problems.

When a committee was appointed in 1915 by the President of the United States from the national engineering societies to constitute a Naval Consulting Board and Committee of Industrial Preparedness, the profession received its highest recognition. This, in fact, is an epoch in the relation of engineers to national affairs. Of this action on the part of the President, Thos. A. Edison said: "This marks almost dramatically the entrance of the trained non-partisan doing his work on the sole basis of efficiency and integrity, into the affairs of the government." The men who are thus chosen have an opportunity of not only making a name for themselves, but of adding much to the prestige of the profession, and there is no doubt whatsoever that they will do so.

Why Engineers Should Have Recognition

It cannot be said, however, we have made any considerable headway towards being recognized in Canada.

In his message to the people of Canada on the 50th anniversary of Confederation, Sir Robert Borden reviewed the development of production, commerce and wealth; the immense increase in transportation facilities; the conspicuous rise in the standards of living, and the great improvement in the general conditions of life throughout the Dominion. He pointed with pride to all this, yet he failed to remark that each and every one of these indications of advancement owes its present state directly to engineering skill, and to engineering progress. In the past, we have not, as a Society, recognized, and consequently are not in a position to enthuse others with the fact, that all material advancement in the history of the world's existence has had its foundation on engineering in some one or other of its branches. It is, therefore, not to be wondered at that members of governments, politicians and the man on the street are ignorant of this fact and fail to give credit where credit is due.

It is only recently that the government of this country has come to the point of recognizing, even in the most limited sense, that the training of the engineer eminently fits him for any special position of executive responsibility. When the premier appointed Mr. C. A. Magrath, M. Can. Soc. C. E., to the chairmanship of the International Joint Commission he felt called upon to apologize for appointing an engineer, because it has been generally understood that positions of this kind were the special domain of the lawyer. As you know, Mr. Magrath, since his appointment, has more than justified it in every sense of the term, and later, as fuel controller, has handled the fuel situation of Canada, although his problem was a most difficult one, in a manner that commands the admiration and respect of all.

The government of the United States appointed as food controller Herbert Hoover, M. Am. Soc. C. E. Canada appointed a lawyer for this office. Note the difference. The engineer went about his work with the idea foremost in his mind of carrying out and securing the desired result for which a food controller was needed, namely, to con-

serve food resources, assure reasonable prices, eliminate profiteering and assist the Allies to secure supplies. The work of the engineer food controller in the United States has resulted in the prices of food products steadily decreasing, while in Canada during the same period, they have increased by leaps and bounds.

Here we have a practical, definite illustration of the difference of what is to be expected from the appointment of an engineer when something definite was to be done in contrast to a lawyer. This is possibly the first time we have had an opportunity of comparing the methods of the two, and we owe it to ourselves to educate the public to this fundamental difference of attitude of mind and directness of purpose between the methods of the engineer and the politician. The significance of this example cannot be too strongly emphasized and cannot be too firmly impressed upon the minds of the citizens of this country.

Our own president, Col. John S. Dennis, was appointed by the British government some months ago to take charge of the British recruiting mission at Chicago, and the record he has established as recruiting officer stands without a parallel for achievement on this continent. During the time he has been actively engaged over twelve thousand volunteers have been recruited,—more than were enlisted in the whole of Canada during that time. After one speech he made in Providence, R. I., 76 men applied for admission to the Canadian army. Last month Col. Dennis, who is sixty years old, in the course of his work, travelled by rail nearly five thousand miles, marched three hundred miles on foot, visited thirty-two places and made sixty-seven speeches. This illustrates again the inbred sense of responsibility and joy in accomplishment, without practical thought of reward, that characterizes the engineer.

If the striking manner in which engineers carry out special work assigned to them is not sufficient to give the whole profession added prestige, then the part played by our gallant men in connection with the great war should surely have some affect. We have nearly 30 per cent. of our entire membership actively participating in the war. They have performed deeds of bravery and endurance that would put to shame the heroes of history or mythology. They have made it possible to conduct the great campaigns by providing transportation, water and sanitary facilities, while exposed, for the most part, to the fire of the enemy, and the war will be won largely by the superior engineering skill of the Allies in comparison with the Germans, whose whole history has been one of stolen ideas.

It would be well perhaps if we considered the engineering profession in the light of conquerors. The title "Conquerors" was given to a special publication of the Cleveland Engineering Society, which described notable engineering achievements. The more one dwells upon the thought the more fitting becomes the simile of applying the term "conquerors" to the profession, for the engineers have been conquerors in the highest and best and noblest sense of the word, as it is the engineer who has succeeded in overcoming the turbulence of nature, eliminating distance, conquering space, and making the earth, the sea, and the air subservient to the welfare of mankind.

Unity and Co-operation

To accomplish any near approach to our possibilities, greater unity and co-operation will be necessary. These to some extent might become our watchwords.

Events in the world of engineering activities show clearly and unmistakably that a new era is dawning for