## The Engineer as a Citizen

The Engineer Essential to Civilization—Should Study Legislation and Administration—Morale Important—Responsibility in Civic Life—His Relation to Public Opinion—Eliminate Expensive System of Competition in Production and Distribution

THE CIVIC RESPONSIBILITY OF THE ENGINEER\*

## PHILIP N. MOORE

T HE engineer, waking from long sleep of indifference and self content, satisfied with himself in his professional successes, has suddenly waked to the fact that he is not politically potent. He has not counted as a class politically, because he has not served politically; he has not, save in rare cases, developed in himself the political sense. In the professional heart-searching, momently the dominant mood, he seeks the reason.

Broadly speaking, the answer is plain. He has not cared enough to exert himself personally or professionally to attain an end which now at last seems to him worth while and vital.

Given like heredity and culture, there is no inherent reason why an engineer should react differently from any other citizen to the patriotic call or civic responsibility. But, unfortunately, things have combined to leave him too often unwanted and uncalled. What are these things?

First, lack of local attachments. With few exceptions, the engineer's tasks are scattered countrywide, or worldwide, and mostly are those of construction, which, completed, he goes his way to build again. He works under strain, he has little time to forgather with his fellows, or to think in terms of political or national interest and service, save as great emergencies come like that of the late war. And without local responsibilities a man feels little sense of civic duty and finds less opportunity for participation in national questions.

Second, a large proportion of the total body of engineers serve the great business consolidations, many of which have interests adverse to the public, or by their very size induce criticism and political attack, and in self-defence they think they must hold their staffs to strict neutrality on all public questions.

Third, the engineer's training has failed to teach that the greatest task of all is the ability to persuade men, and unwillingness or incapacity to enter public discussions, either through modesty or lack of readiness, have held him back. False professional pride, and the same indifference which holds back many high-class men through unwillingness to mingle with and rub shoulders against the great majority, have also deterred him.

Fourth, the past habits of the great organizations which the engineer forms (and which voice his profession) to hold themselves aloof from political affairs as collectively unethical.

What shall be the remedy for the engineer's isolation? It is within himself. He must realize that the duty is in him first and then in his society. By virtue of his exact knowledge of the things which build so large a share of civic affairs, for so much is engineering, he is particularly fitted to render expert advice and service.

We need fearless men who, in the market place and from the housetop shall proclaim to the world: That since the beginning of history brains have ruled brawn; that the brain deserves, and in the ultimate will inevitably receive, greater reward than the hand; and that any proposed condition which puts brawn over brains plans the pyramid on its apex and necessarily is one of unstable equilibrium.

\*Abstract from paper read before the Metropolitan District Engineers, New York City, "Mechanical Engineering." These are a few of the things we can preach, and because we fear no political backfire. We have no fences to mend. We can stand in the open and say everlasting truths, and the time will come when some men may believe them.

## THE RELATION OF THE ENGINEER TO LEGISLATION

## CALVERT TOWNLEY

W HAT the attitude of the engineer should be toward legislation is a question that has been debated with considerable vigor for many years. Opinions differ widely, and range all the way from that of the ultra-conservative, who believes that the engineer should have nothing whatever to do with legislation or politics, to that of the ultra-radical, who thinks that he should direct all legislation—in fact, that no government function should be exercised except under his direction.

It may help us to visualize the present situation if we examine briefly one or two of the ways in which engineers have attempted to influence legislation heretofore. In 1911 the American Institute of Electrical Engineers, on invitation from the National Waterways Commission, sent a committee to Washington to appear before the commission. The committee was assisted by a special advisory committee, and held several meetings before proceeding to Washington in order to determine just what should be their policy and what sort of a presentment they should make. It was decided that the committee should confine itself strictly to a statement of engineering and allied facts which engineers were peculiarly competent to testify and which were beyond the field of controversy. They were instructed to refrain from expressing views as to the wording of any legislation or to give opinions regarding legal matters.

In 1911 a bill was introduced in the New York state legislature to license engineers and which aroused the alarm and stirred up the strenuous opposition of the four national engineering societies. A joint committee was appointed from these societies, and from the Institute of Naval Architects and Marine Engineers as well. This committee sent a strong represention to Albany, which appeared before the Legislative Committee and vigorously opposed and assisted in defeating this attempted legislation. It was found desirable to take somewhat similar action again in 1913. Feeling that it would be advantageous to have some means of co-operation among the national engineering societies, this committee was continued under the title of a Joint National Committee of Engineering Societies and continued to serve for several years, its activities, however, not by any means being confined to legislative matters. One of its functions was to serve with respect to the National Engineering Congress held in California in 1915, and out of it grew the discussion which finally resulted in the organization of the Engineering Council.

The Engineering Council has been in existence since May, 1917. It has been in receipt of many requests to favor or oppose legislation, and this legislation is by no means confined to questions of engineering, but covers every sort of subject from the fixing of a minimum wage for labor up to the organization of the army for the conduct of war.

The Engineering Council was created to speak for its constituent societies on matters of common concern to engineers, and to afford a means for joint action when desirable. Its by-laws give it wide latitude, and there have