

A Weekly Paper for Canadian Civil Engineers and Contractors

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ENGINEERING CO-OPERATION

Attention has been drawn at intervals to the fact that industry as a whole is dependent upon the lesser as well as the greater elements in its composition. The directing brain is only possible because there are minor posts and trained men to fill them, in exactly the same manner as a general is a possibility only by the existence of an army to command.

Sport and industry depend essentially upon the factor of co-operation, for without its spirit any pastime and also the greater game fail to accomplish anything worth while. To be successful in organized sport or organized work means that the individual must make his personal aims subservient to, or dovetail into, a common purpose.

Tradition, method and national spirit are not easily built, but to these, multitudes of unknown units have contributed and their work survives. In this sense the unrecorded units have a perpetual life. This merely emphasizes the importance of the individual unit, for if he default, the collective result is thereby the poorer.

It is team effort with a divisible reward; individual responsibility with a common aim, which makes an industry or profession a national success exactly as it makes sport successful. One unit bulks so small against the mass, seems so trivial, that the common whole must suffer by individual default.

Whatever may be the case elsewhere, responsibility in engineering matters rests as surely upon the man lower down as upon the chief who takes the whole responsibility and incidentally the entire blame. This responsibility is

both individual and collective and to foster and intensify its realization is wise policy. The gradations in engineering effort are perhaps more numerous than anywhere else save in military matters. Each unit in the scale is essential, none are contemptible, all are necessary, and responsibility for the total result rests upon each in accordance with his task.

The human machine of industry is astonishingly complex; its mechanism so varied that an organization successful in one connection may prove faulty if transferred bodily elsewhere. To build up an organization worth anything means unremitting thought and labor, constant patching of weak places and a balanced judgment on the part of its executive.

It is the spirit of co-operation more than any other intangible factor which lubricates the system, a desire to be helpful and subordinate self which makes the machine move smoothly, without friction and its attendant drawbacks.

Individual enterprise is a very valuable thing, but individualism which will not assimilate, will not co-operate, is not to be commended. No large enterprise can come to fruition, no business, no scheme can arrive at a successful result lacking this desire on the part of those interested.

There may be two parties holding diverse views, but compromise upon a common denominator acceptable to both or conviction of superiority by one upon the other is essential. Having reached a decision, all must loyally press forward, having only one opinion. In such wise good work can be done,—two viewpoints necessary, perhaps, but only one end to achieve.

That engineering works of great magnitude have been accomplished in the teeth of many impediments, natural and otherwise, proves that the human machine by which they were performed carried co-operation to a very high plane, for unless all hands had been animated by the right spirit, such tasks were humanly impossible.

WHY NOT A MINISTER OF PUBLIC HEALTH?

Questions concerning public health are being discussed to-day more than ever, and properly so, as the conservation of health means conservation of man power. Disease weakens workers, cripples industry and reduces production.

Societies, the primary object of which is to discuss ways and means of promoting public health, are becoming quite numerous. Greater attention is being given to such matters as water purification, sewage disposal, scavenging, street cleaning, and many other phases of engineering which have a bearing on the public welfare.

From an economic point of view, authorities now realize how important is the safeguarding of public health.

In view of these facts, it is too much to hope that before very long, possibly after the war is over, steps will be taken toward the establishment of a federal department of health, with a minister of public health at the head, under whom there should be a co-ordination of all the different existing agencies dedicated to public health? With such a department, under the leadership of a man with broad views and not too limited powers, much really valuable sanitary survey and research work could be done in co-operation with provincial and municipal boards of health.