

pend or approve any public engineering contract.

Recall of any director could be enacted only by Parliament. Each director upon entering office should be required to tender a formal resignation to the Governor General in Council; the resignation being signed but *undated*. Should a reason arise making it necessary to recall any particular director a vote could be taken in the House of Commons. With the approval of the members, the resignation of the director could be accepted. The date when resignation should take effect could be specified by Parliament and filled in by the Governor General in Council. Thus affecting drastic control of any director by the nation through the national house of representatives.

Following upon the successful establishment of a Board of Directors, the process of gradually building up a staff of expert engineers would commence. It would not be proposed to interfere with the regular working system of government departments other than to consider and report upon national projects until the success of the Board as an instrument for promoting economic efficiency had been thoroughly established. But the ultimate aim would be transference of the purely technical work from the various independent units and staffs to the National Board of Engineering Control.

Momentous questions are looming up regarding the policy of canal construction in Canada. To deal adequately with the great problem of freight transportation by water it would need a completely organized staff of canal experts. The logical proceeding would be to appoint a Chief Engineer of Canals and Water Service responsible to the Board of Control; with the necessary assistant engineers, draughtsmen and technical clerks.

Departmental engineers with the necessary experience could be transferred to form the staff. In the pro-

cess of time similar staffs could be built up, all directly under the Board of Control, to deal with Railways, Marine Service, Harbours, and the rest, until the majority of engineers at present scattered through the various departments would have assembled entirely under the direction of the Board. Where necessary a consulting engineer could remain on the staff of an administrative department. So that should questions arise regarding, for instance, the lease of a water power it would be the consulting engineer's duty to see that the questions were submitted in their proper form with regard to their technical matter. Just as at present the law clerk or auditor of a department might be required to attend to questions coming under the jurisdiction of the Department of Justice or Auditor General.

The staff engineers responsible to the Board of Control would be men widely experienced in particular branches: the chief engineer of railways an expert in railway engineering; the chief engineer of marine service a qualified engineer in marine work; the chief engineer of canals and water service should include on his staff expert hydro-electric engineers and irrigation engineers; chief of surveys to be responsible for all state surveying and conservation, and chief engineer of harbours to include a designer of grain elevators. Each chief engineer would have an estimating assistant who should be especially trained to deal with the economic branch of engineering; economics and finance being the most important features in civil engineering under the present-day industrial system. It would be the estimating assistant engineer's duty to have reports prepared and estimates made dealing with the economic aspects of any proposed undertaking. Other assistants, electrical, mechanical, hydraulic, would be included on the staff where necessary. Bridge engineers under the chief of railways, ship designers under the chief of marine, draughtsmen